

Yellow Jacket 40370

YELLOW JACKET P51-870 TITAN Digital Manifold User Manual

Model: 40370

INTRODUCTION

The YELLOW JACKET P51 TITAN Digital Manifold Series is designed to provide precise and efficient system measurements for refrigeration and air conditioning systems. This 4-valve manifold offers fast and accurate readings, displayed on a backlit digital screen. Its Bluetooth connectivity allows for further analysis via a smartphone application. This manual provides essential information for the proper setup, operation, maintenance, and troubleshooting of your P51-870 TITAN Digital Manifold.

PACKAGE CONTENTS

Upon opening your YELLOW JACKET P51-870 TITAN Digital Manifold package, please verify that all the following components are included:

- YELLOW JACKET P51-870 TITAN Digital Manifold Unit
- Vacuum Sensor
- Set of 4 Manifold Hoses
- Backpack Carrying Case
- Temperature Clamps (if included in specific kit)



Image: The YELLOW JACKET P51-870 TITAN Digital Manifold kit, including the manifold unit, a set of four colored hoses (red, yellow, blue), and a black backpack carrying case. The manifold unit is visible in its packaging, showcasing its digital display.

SETUP

1. **Unpacking:** Carefully remove all components from the packaging. Inspect for any signs of damage during transit.
2. **Battery Installation/Charging:** Ensure the manifold's internal rechargeable battery is fully charged before first use. Refer to the charging port location, typically on the side or back of the unit.
3. **Hose Connection:** Connect the manifold hoses to the appropriate ports on the P51-870 unit. The hoses are typically color-coded (red for high pressure, blue for low pressure, yellow for vacuum/refrigerant).
4. **Vacuum Sensor Connection:** If using the included vacuum sensor, connect it to the designated port on the manifold.
5. **Power On:** Press and hold the power button (location may vary, typically near the display) until the 4.3-inch full-color touch screen display illuminates.

6. **Initial Configuration:** Follow any on-screen prompts for initial setup, such as language selection, unit preferences (e.g., psi, kPa, °F, °C), and date/time settings.
7. **Bluetooth Pairing (Optional):** To utilize the smartphone application for further analysis, enable Bluetooth on the manifold and your smartphone. Open the YELLOW JACKET companion app and follow the in-app instructions to pair with your P51-870 TITAN unit.

OPERATING INSTRUCTIONS

Basic Operation

- **Display Navigation:** Use the touch screen to navigate through menus and view different measurement parameters (pressure, temperature, superheat, subcool, vacuum).
- **Pressure Measurement:** Connect the manifold hoses to the high and low-side service ports of the refrigeration or A/C system. Open the manifold valves to read the system pressures on the digital display.
- **Temperature Measurement:** If using temperature clamps, attach them to the appropriate lines (e.g., suction line for superheat, liquid line for subcool). The manifold will display the temperatures and calculate superheat/subcool values.
- **Vacuum Measurement:** Connect the vacuum sensor to the system and the manifold. The display will show the vacuum level in microns.

Advanced Features

- **Data Logging:** The P51-870 TITAN can log data from up to six YELLOW JACKET devices, including its own measurements. Access the data logging function through the display menu.
- **Pressure Hold Tests:** Perform pressure hold tests to check for system leaks. Follow the on-screen instructions to initiate and monitor these tests.
- **Liquid and Vapor Saturation Temperatures:** The manifold automatically calculates and displays liquid and vapor saturation temperatures based on the measured pressures and selected refrigerant.

For detailed instructions on specific functions and refrigerant types, refer to the full digital manual available via the YELLOW JACKET website or the companion app.

MAINTENANCE

- **Cleaning:** Clean the manifold's exterior, especially the touch screen, with a soft, damp cloth. Avoid abrasive cleaners or solvents that could damage the display or casing.
- **Hose Inspection:** Regularly inspect manifold hoses for cracks, leaks, or wear. Replace damaged hoses immediately to ensure accurate readings and prevent refrigerant loss.
- **Vacuum Sensor Care:** Keep the vacuum sensor clean and free of oil or debris. Store it in a protective manner when not in use.
- **Battery Care:** To prolong battery life, avoid fully discharging the battery frequently. Store the unit with a partial charge if it will not be used for an extended period.
- **Software Updates:** Periodically check the YELLOW JACKET website or companion app for firmware updates. Keeping the software updated ensures optimal performance and access to new features.
- **Storage:** Store the manifold and its accessories in the provided backpack carrying case to protect them from dust, moisture, and physical damage.

TROUBLESHOOTING

Problem	Possible Cause	Solution
Unit does not power on.	Battery is discharged or faulty.	Charge the battery. If problem persists, contact support.
Inaccurate pressure readings.	Hoses are leaking or clogged; manifold needs calibration.	Inspect hoses for damage and replace if necessary. Refer to calibration procedures in the full manual or contact support.
Bluetooth connection issues.	Bluetooth is off on manifold/phone; interference; app issues.	Ensure Bluetooth is enabled on both devices. Move closer to the manifold. Restart the app or phone.
Touch screen unresponsive.	Software glitch; physical damage.	Perform a soft reset (refer to full manual for procedure). If unresponsive after reset, contact support.

If you encounter issues not listed here or if the suggested solutions do not resolve the problem, please contact YELLOW JACKET customer support.

SPECIFICATIONS

Feature	Detail
Model Number	40370 (P51-870 TITAN Digital Manifold)
Display	4.3-inch Full Color Touch Screen
Measurements	Pressure, Temperature, Superheat, Subcool, Vacuum
Connectivity	Bluetooth (for smartphone app and YJACK devices)
Material	Aluminum, Stainless Steel
Item Weight	2.63 Pounds (approx.)
Package Dimensions	17.95 x 13.39 x 9.45 inches (approx.)
Manufacturer	RITCHIE YELLOWJACKET
UPC	686800408705





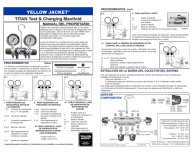

WARRANTY AND SUPPORT

The YELLOW JACKET P51-870 TITAN Digital Manifold is backed by a manufacturer's warranty. For specific warranty terms, duration, and conditions, please refer to the warranty card included with your product or visit the official YELLOW JACKET website. Keep your proof of purchase for warranty claims.

For technical support, service, or warranty inquiries, please contact RITCHIE YELLOWJACKET customer service. Contact information can typically be found on the manufacturer's website or in the product packaging.

Important Note: As per customer feedback, warranty claims may be affected if the product is not purchased from an authorized distributor. It is recommended to verify the seller's authorization status if purchasing from third-party vendors.

Related Documents - 40370

	<p>Yellow Jacket P51-870 TITAN Digital Manifold Quick Start Guide</p> <p>A quick start guide for the Yellow Jacket P51-870 TITAN Digital Manifold, covering operation modes, settings, and data management.</p>
	<p>YELLOW JACKET P51-860 TITAN™ User Manual</p> <p>Comprehensive user manual for the YELLOW JACKET P51-860 TITAN™ Digital Manifold, covering setup, operation modes, settings, maintenance, troubleshooting, and app integration for HVAC professionals.</p>
	<p>Yellow Jacket HVAC/R Diagnostic Tools and Charging Systems Catalog</p> <p>Comprehensive catalog showcasing Yellow Jacket's range of HVAC/R diagnostic tools, including the P51 TITAN® digital manifolds, YJACK™ wireless probes, charging kits, and various manifold types designed for efficient system analysis and safe charging.</p>
	<p>Yellow Jacket HVAC/R Charging Systems & Diagnostic Tools Catalog</p> <p>This catalog showcases Yellow Jacket's comprehensive range of HVAC/R charging systems and diagnostic tools, including the YJACK™ Series wireless sensors, P51 TITAN® Digital Manifolds, ManTooth® Wireless Gauges, and various BRUTE II® and Series 41 manifolds. The products are designed for accurate measurements, efficient system analysis, and enhanced user experience in HVAC/R applications.</p>
	<p>Yellow Jacket TITAN Test & Charging Manifold Owner's Manual</p> <p>Comprehensive owner's manual for the Yellow Jacket TITAN Test & Charging Manifold, detailing procedures for vacuum, pressure setting, purging, charging, and system evacuation. Includes component list and safety information.</p>
	<p>YELLOW JACKET TITANMAX™ User Manual</p> <p>Comprehensive user manual for the YELLOW JACKET TITANMAX™ digital manifold, detailing its features, operation, settings, maintenance, and troubleshooting for HVAC professionals. Includes model numbers P/N 40880, 40881, 40885, 40887.</p>