Shimpo DT-501XA

Shimpo DT-501XA Panel Meter Tachometer User Manual

Model: DT-501XA | Brand: Shimpo

1. Introduction

The Shimpo DT-501XA is a versatile panel meter designed for precise measurement and display of rotational speed (tachometer) or flow rates (flowmeter) in industrial environments. This device offers a wide measurement range and is powered by 100-240 VAC, making it suitable for various applications requiring accurate process monitoring. This manual provides essential information for the safe and efficient installation, operation, and maintenance of your DT-501XA unit.

2. Safety Information

Please read and understand all safety instructions before installing or operating the DT-501XA. Failure to comply with these instructions may result in personal injury or damage to the equipment.

- **Electrical Safety:** Ensure power is disconnected before making any electrical connections. All wiring should be performed by qualified personnel in accordance with local electrical codes.
- **Proper Installation:** Install the unit in a clean, dry environment, free from excessive vibration, dust, and corrosive gases.
- **Operating Environment:** Do not operate the device outside its specified temperature and humidity ranges.
- **Maintenance:** Only qualified service personnel should perform maintenance or repairs.

3. Package Contents

Verify that all items are present upon unpacking:

- Shimpo DT-501XA Panel Meter Tachometer
- Waterproofing O-ring
- Engineering Unit Decal Sheet
- User Manual (this document)

4. Setup and Installation

Proper installation is crucial for the accurate and reliable operation of the DT-501XA.

4.1. Mounting

The DT-501XA is designed for panel mounting. Ensure the panel cutout dimensions match the unit's specifications for a secure fit. Use the provided mounting brackets to firmly secure the unit in place.



A close-up view of the Shimpo DT-501XA Panel Meter Tachometer, highlighting its compact design and the white mounting brackets on the sides, ready for installation into a control panel.

4.2. Wiring

Connect the power supply (100-240 VAC) to the designated terminals. Connect your input sensor (e.g., proximity sensor, encoder) to the signal input terminals. Refer to the wiring diagram provided with the unit for specific terminal assignments. Ensure all connections are secure and properly insulated.



This image shows the front view of the Shimpo DT-501XA Panel Meter Tachometer, featuring its red LED digital display and control buttons below. The device is designed for panel mounting.

4.3. Initial Power-On

After all connections are made and verified, apply power to the unit. The display should illuminate. If not, immediately disconnect power and re-check all wiring.

5. Operating Instructions

The DT-501XA features a clear digital display and intuitive controls for easy operation.

5.1. Display Overview

The unit features a 6-digit red LED display capable of showing values from 0 to 999,999. This display indicates the measured rotational speed (RPM) or flow rate, depending on the configured mode.

5.2. Button Functions

The front panel includes several buttons for configuration and operation:

- **SET:** Enters parameter setting mode.
- **SHIFT:** Used to move the cursor or select digits during parameter setting.
- **MEM:** Accesses stored memory values or settings.
- **TEACH:** Used for calibration or learning input signals.
- **PARA (Parameter):** Navigates through different parameter groups.
- **FUNC (Function):** Selects various operational functions or modes.
- **ENT (Enter):** Confirms selections or enters values.
- **MODE:** Switches between different display or operational modes.

Detailed instructions for specific parameter settings and mode configurations are available in the full technical manual (not included in this basic guide).

6. Maintenance

The DT-501XA is designed for minimal maintenance. Regular care ensures optimal performance and longevity.

- **Cleaning:** Gently wipe the display and casing with a soft, damp cloth. Do not use abrasive cleaners or solvents.
- **Inspection:** Periodically check all wiring connections for tightness and signs of wear or damage. Ensure the unit is free from dust buildup, especially around ventilation slots.
- **Environmental Conditions:** Maintain the operating environment within specified limits to prevent premature component failure.

7. Troubleshooting

Refer to the following common issues and solutions before contacting technical support.

Problem	Possible Cause	Solution
Display is blank	No power, incorrect wiring, internal fault	Check power supply and connections. Verify wiring against diagram. If problem persists, contact support.
Incorrect or unstable readings	Sensor issue, incorrect input settings, electrical noise	Check sensor connection and functionality. Verify input parameters (e.g., pulse per revolution, scaling). Ensure proper shielding for signal cables.
Buttons unresponsive	Temporary software glitch, physical damage	Power cycle the unit. If buttons remain unresponsive, contact technical support.

8. Specifications

Brand	Shimpo
Model	DT-501XA
Product Type	Panel Meter Tachometer / Flowmeter
Power Supply	100-240 VAC
Measurement Range	0-999,999
Display	6-digit Red LED

Material	Plastic
Item Dimensions (L x W x H)	9.2 x 9.6 x 4.8 cm
Package Dimensions (L x W x H)	12 x 8 x 5 inches
Package Weight	1 pound
Included Components	Waterproofing O-ring, Engineering Unit Decal Sheet
Country of Origin	Japan

9. Warranty and Support

The Shimpo DT-501XA Panel Meter Tachometer is backed by a manufacturer's warranty against defects in materials and workmanship. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official Shimpo website.

For technical assistance, troubleshooting beyond this manual, or to inquire about service and repairs, please contact Shimpo customer support through their official channels. When contacting support, please have your model number (DT-501XA) and purchase information readily available.

© 2023 Shimpo. All rights reserved. Information in this manual is subject to change without notice.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question