DigiTech QM1448

Handheld Digital Tachometer - DT-48 User Manual

Model: QM1448

1. Introduction

This manual provides comprehensive instructions for the safe and effective operation of your DigiTech Handheld Digital Tachometer, model DT-48. This device is designed for non-contact measurement of rotational speed (RPM) and total revolutions, offering high accuracy and ease of use for various applications.

Figure 1: DigiTech Handheld Digital Tachometer DT-48. This image displays the front of the tachometer, highlighting its five-digit LCD screen, the 'RPM/TOT' button for mode selection, and the 'MEM' button for memory functions. A laser warning symbol is visible at the top, indicating the laser emission point.

2. Safety Information

Please read all safety warnings and instructions carefully before using this product. Failure to follow these instructions may result in injury or damage to the device.

- **Laser Safety:** This device emits a Class II laser. Do not stare directly into the laser beam or direct it at other people's eyes. Avoid prolonged exposure.
- **Battery Handling:** Use only the specified battery type (4 AA batteries). Do not mix old and new batteries, or different types of batteries. Dispose of batteries according to local regulations.
- **Environmental Conditions:** Do not expose the device to extreme temperatures, humidity, or direct sunlight. Avoid dropping the device or subjecting it to strong impacts.
- **Maintenance:** Do not attempt to disassemble or modify the device. Refer all servicing to qualified personnel.

3. Product Features

The DigiTech DT-48 Handheld Digital Tachometer offers the following key features:

- Large, five-digit LCD screen for clear display of measurements.
- Ability to measure actual Revolutions Per Minute (RPM) or total revolutions.
- Equipped with a laser pointer for accurate targeting of the measurement point.
- Low-battery indicator to alert users when battery replacement is needed.
- Automatic storage of the last measurement, along with maximum and minimum readings.
- Comes with a protective carrying case for portability and storage.

4. Setup

4.1 Battery Installation

1. Locate the battery compartment cover on the rear of the tachometer.
2. Slide or unclip the cover to open the compartment.
3. Insert 4 AA batteries, ensuring correct polarity (+/-) as indicated inside the compartment.
4. Replace the battery compartment cover securely.

4.2 Preparing the Target Surface

For accurate non-contact measurement, a reflective target must be applied to the rotating object. If the object's surface is already reflective, no additional target may be needed. Otherwise, attach a small piece of reflective tape (not included) to the rotating part where the laser beam will be directed.

5. Operating Instructions

5.1 Powering On/Off

Press the power button (usually located on the side or front) to turn the tachometer on. The LCD display will illuminate. Press and hold the power button again to turn the device off.

5.2 Selecting Measurement Mode (RPM / Total Revolutions)

The tachometer can measure either Revolutions Per Minute (RPM) or Total Revolutions. Press the 'RPM/TOT' button to toggle between these two modes. The selected mode will be indicated on the LCD display.

5.3 Taking a Measurement

1. Ensure the tachometer is powered on and the desired measurement mode is selected.
2. Point the laser beam at the reflective target on the rotating object. Maintain a detecting distance between 50mm and 500mm.
3. Press and hold the measurement trigger button (often located on the side or front). The laser will activate, and the display will show the real-time measurement.
4. Release the measurement trigger button to hold the last reading on the display.

5.4 Memory Function

The tachometer automatically stores the last measurement, as well as the maximum and minimum measurements recorded during a measurement session.

- Press the 'MEM' button to cycle through the stored values: Last Reading, Maximum Reading, and Minimum Reading.

- To clear the memory, refer to the specific instructions in the device's full manual if available, or typically, turning the device off and on will clear the session memory.

6. Maintenance

6.1 Cleaning

Wipe the device with a soft, dry cloth. Do not use abrasive cleaners, solvents, or immerse the device in water. Keep the laser emission and reception lenses clean for accurate readings.

6.2 Storage

When not in use for extended periods, remove the batteries to prevent leakage. Store the tachometer in its carrying case in a cool, dry place, away from direct sunlight and extreme temperatures.

7. Troubleshooting

Problem	Possible Cause	Solution
Device does not power on.	Dead or incorrectly installed batteries.	Check battery polarity. Replace with new AA batteries.
Inaccurate or unstable readings.	Incorrect detecting distance; dirty lens; insufficient reflective target; ambient light interference.	Ensure distance is within 50mm-500mm. Clean the lens. Ensure reflective tape is properly applied and sufficient. Reduce strong ambient light if possible.
Laser not visible.	Device not powered on; laser malfunction.	Ensure device is on and measurement button is pressed. If still not visible, contact support.
Low battery indicator is on.	Batteries are low.	Replace all 4 AA batteries.

8. Specifications

Parameter	Value
Brand	DigiTech
Model Number	QM1448
Test Range	2.5 to 99,999 RPM
Accuracy	±0.05%
Sampling Time	0.5 seconds (over 120 RPM)
Detecting Distance	50mm to 500mm
Display	5-digit LCD
Power Supply	4 x AA batteries (included)
Item Weight	2 kg

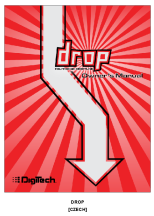
Parameter	Value
ASIN	B077XSGJVC
Date First Available	2 December 2017

9. Warranty and Support

For warranty information and technical support, please refer to the documentation provided at the time of purchase or contact your retailer. Keep your purchase receipt as proof of purchase.

Related Documents - QM1448

	DigiTech Whammy DT Kezelési Útmutató Ez a dokumentum a DigiTech Whammy DT gitár effektpedál kezelési útmutatója. Részletes információkat tartalmaz a pedál funkcióiról, csatlakozásairól, különféle effektekről (Whammy, Harmony, Detune, Drop Tune), MIDI vezérlésről, műszaki specifikációkról és biztonsági előírásokról.
	Manuale del Proprietario DigiTech DROP: Guida Completa al Pedale Pitch Shifter Polifonico Scopri il pedale DigiTech DROP con questo manuale utente completo. Impara a usare il pitch shifter polifonico, le sue caratteristiche, le connessioni e le specifiche tecniche per migliorare il tuo suono.
	DigiTech DROP Polyphonic Pitch Shifter Guitar Effects Pedal - Owner's Manual Comprehensive owner's manual for the DigiTech DROP polyphonic pitch shifter guitar effects pedal. Learn about its features, user interface, connections, specifications, safety guidelines, and compliance information.
	DigiTech Whammy DT Bedienungshandbuch | Effektpedal für Gitarre Umfassendes Bedienungshandbuch für das DigiTech Whammy DT Gitarreneffektpedal. Erfahren Sie mehr über Funktionen, Anschlüsse, Effekte und technische Spezifikationen.

	DigiTech Drop Polyfonní Pedál Ladění – Uživatelský Manuál Podrobný manuál pro kytarový efekt DigiTech Drop. Zjistěte vše o funkcích, ovládání, zapojení, specifikacích a bezpečnostních pokynech tohoto polyfonního pedálu pro změnu výšky tónu.
	DigiTech Drop Polyphonic Pitch Shifter Pedal - User Manual Comprehensive user manual for the DigiTech Drop polyphonic pitch shifter guitar pedal, covering features, operation, specifications, and warranty information. Learn how to use the drop tune effect, momentary settings, and connections.