Jectse AR925

Jectse AR925 Digital Contact Tachometer User Manual

Model: AR925

1. Product Overview

The Jectse AR925 Digital Contact Tachometer is an instrument designed for precise measurement of rotating and linear rolling speeds. It utilizes advanced electro-optical technology to provide accurate readings across a wide range of applications. This device is equipped with a clear LCD display and features automatic storage of maximum, minimum, and last measured values for convenient data analysis.

Image 1.1: Jectse AR925 Digital Contact Tachometer in use, showing the display.

Key Features:

- Utilizes MCU and electro-optical technology for efficient measurement of rotating and linear rolling speed.
- Wide measuring range of 0.5-19999 RPM with high resolution.
- Large LCD display for clear and easy-to-read measurements.
- Automatically stores the maximum (MAX), minimum (MIN), and last (LAST) measured values.
- Includes convertible accessories for various measurement applications.

2. Package Contents

Upon unpacking, please verify that all items listed below are present and in good condition:

- 1 x Jectse AR925 Digital Contact Tachometer
- 1 x Linear Circular Probe
- 1 x Speed Column Probe
- 1 x Speed Large Cone Probe

- 1 x Speed Small Cone Probe
- 1 x Carrying Bag
- 1 x User Manual (this document)

Image 2.1: The tachometer and its various contact probes and carrying bag.

3. Device Components

Familiarize yourself with the main components and controls of the AR925 Digital Contact Tachometer:

Image 3.1: Labeled diagram of the tachometer's front panel and contact head.

1. **Contact Rotate Head:** The rotating shaft where different contact probes are attached for measurement.
2. **LCD Display:** Shows measurement readings, units, and stored values.
3. **Memory Button (MEM):** Used to access stored MAX, MIN, and LAST values.
4. **Measure MAX/MIN Value Button:** Toggles between displaying maximum and minimum recorded speeds.
5. **Switch/Null Button (ON/NULL):** Powers the device on/off and can be used to clear readings or reset.
6. **Unit Button (UNIT):** Changes the measurement unit (e.g., RPM, m/min, ft/min).

4. Specifications

The following table outlines the technical specifications of the Jectse AR925 Digital Contact Tachometer:

Image 4.1: Visual representation of the tachometer's dimensions and key parameters.

Parameter	Value
Measure Range	0.5-19999 RPM, 0.05-19999.9 m/min, 0.2-6560 Ft/min
Resolution Ratio	0.1 RPM, 1 RPM, 0.01 m/min, 0.1 m/min, 1 Ft/min
Measure Error	±(0.05%+1 digit)
Sampling Frequency	0.8 Sec
Measure Method	Contact
Working Temperature	0~50°C
Storage Temperature	-20~70°C
Power	3 * 1.5V AAA battery (Not included)
Weight	132g
Dimensions (L x W x H)	155mm x 55mm x 35mm (6.1 x 2.2 x 1.4 inches)
Material	Acrylonitrile Butadiene Styrene (ABS)

5. Battery Installation

The AR925 Digital Contact Tachometer requires three (3) AAA batteries (not included) for operation. Follow these steps to install the batteries:

1. Locate the battery compartment cover on the back of the tachometer.
2. Slide the battery compartment cover downwards or outwards to open it.
3. Insert three (3) AAA batteries, ensuring correct polarity (+ and -) as indicated inside the compartment.
4. Replace the battery compartment cover by sliding it back into place until it clicks securely.

Image 5.1: View of the open battery compartment, showing where to insert AAA batteries.

6. Operation

This section details how to use your Jectse AR925 Digital Contact Tachometer for various measurements.

6.1 Powering On/Off

- To power on the device, press the **ON/NULL** button.
- The device will automatically power off after approximately 30 seconds of inactivity to conserve battery life. There is no dedicated 'off' button.

6.2 Attaching Contact Probes

Select the appropriate contact head (Linear Circular, Speed Column, Speed Large Cone, or Speed Small Cone) based on the object to be measured. Gently push and twist the chosen probe onto the Contact Rotate Head until it is securely attached.

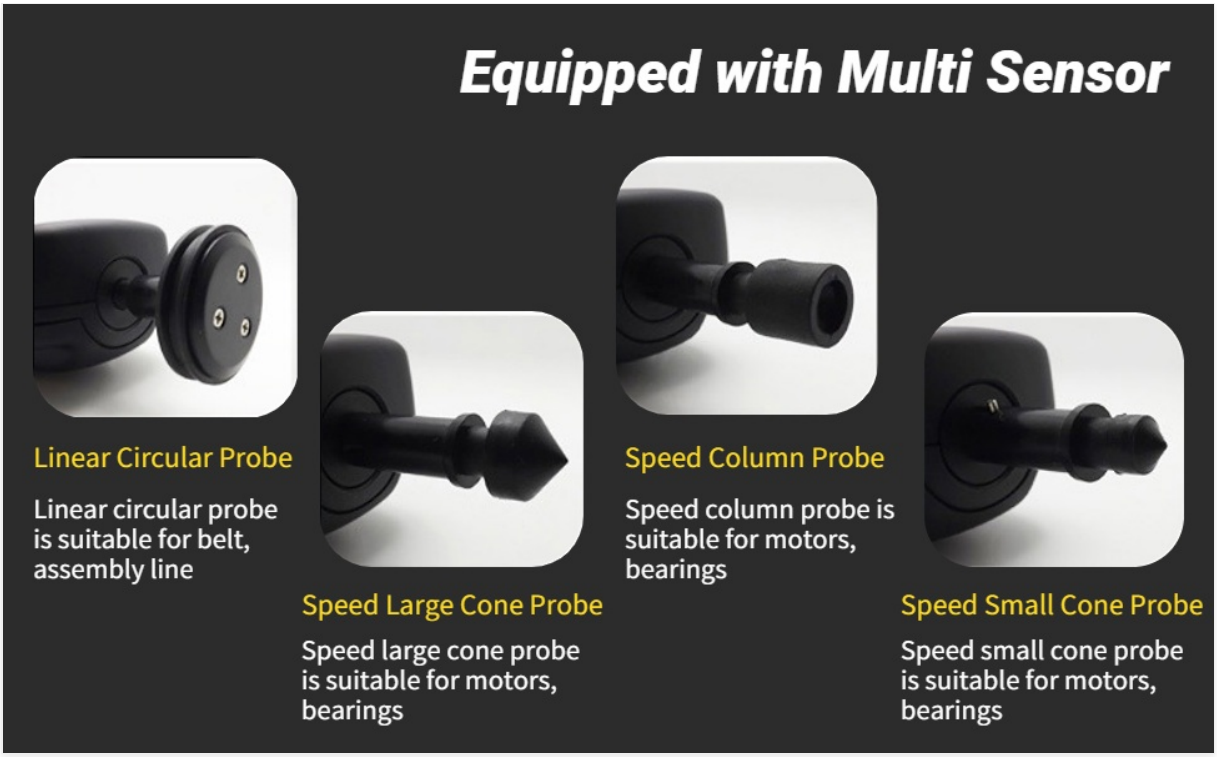

Image 6.1: Overview of the multi-sensor probes included with the tachometer.

6.3 Taking Measurements

1. Ensure the correct contact probe is attached.
2. Press the **ON/NULL** button to power on the tachometer.
3. Gently press the rotating part of the contact probe against the center of the rotating shaft or surface of the object you wish to measure. Maintain steady contact.
4. The LCD display will show the real-time measurement.
5. To change the measurement unit (RPM, m/min, ft/min), press the**UNIT** button.

Image 6.2: Step-by-step illustration of the contact measurement method.

6.4 Viewing Stored Values (MAX/MIN/LAST)

The tachometer automatically stores the maximum, minimum, and last measured values. To view these:

- After taking a measurement, press the **MEM** button.
- Each press of the **MEM** button will cycle through the MAX, MIN, and LAST recorded values.
- The display will indicate which value is currently shown (e.g., "MAX", "MIN", "LAST").

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Video 6.3: A demonstration of the Jectse Digital Contact Tachometer in operation, showcasing its features and measurement capabilities.

7. Maintenance

Proper maintenance ensures the longevity and accuracy of your tachometer.

- **Cleaning:** Wipe the device with a soft, dry cloth. Do not use abrasive cleaners or solvents.
- **Storage:** When not in use for extended periods, remove the batteries to prevent leakage. Store the tachometer and its accessories in the provided carrying bag in a cool, dry place, away from direct sunlight and extreme temperatures.
- **Probe Care:** Inspect contact probes regularly for wear or damage. Replace if necessary to maintain measurement accuracy. Avoid exposing rubber tips to high temperatures, as they may melt.

8. Troubleshooting

If you encounter issues with your tachometer, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Device does not power on.	Dead or incorrectly installed batteries.	Check battery polarity. Replace with new AAA batteries.
Inaccurate or inconsistent readings.	Loose contact with the rotating object; damaged probe; low battery.	Ensure firm and stable contact. Inspect and replace the probe if damaged. Replace batteries.
Display shows '0' or no change during measurement.	No contact or insufficient rotation.	Verify the object is rotating. Ensure the probe is making proper contact with the rotating surface.
Rubber tips on probes melt or deform.	Exposure to high temperatures.	Avoid using the tachometer on surfaces exceeding the probe's temperature resistance. Consider alternative measurement methods for high-temperature applications.

9. Warranty and Support

Jectse products are designed for reliability and performance. For warranty information or technical support, please refer to the contact details provided with your purchase or visit the official Jectse website. Keep your purchase receipt as proof of purchase for any warranty claims.