

R7050

REED INSTRUMENTS

Photo Tachometer



Instruction Manual

REED Instruments

1-877-849-2127 | info@reedinstruments.com | www.reedinstruments.com

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Introduction

Thank you for purchasing your REED R7050 Photo Tachometer. Please read the following instructions carefully before using your instrument. By following the steps outlined in this manual your meter will provide years of reliable service.

Product Quality

This product has been manufactured in an ISO9001 facility and has been calibrated during the manufacturing process to meet stated product specifications. If a certificate of calibration is required please contact the nearest authorized REED distributor or authorized Service Center. Please note an additional fee for this service will apply.

Safety

- Never attempt to repair or modify your instrument. Dismantling your product, other than for the purpose of replacing batteries, may cause damage that will not be covered under the manufacturer's warranty. Servicing should only be provided by an authorized service center.
- Use extreme caution when the laser beam is turned on.
- Do not let the beam enter your eye, another person's eye or the eye of an animal.
- Be careful not to point the beam off a reflective surface and strike your eye.



Features

- Provides fast and accurate RPM measurements of rotating objects without contact and revolution count of moving objects
- Built-in laser pointer identifies target area
- Durable double molded plastic housing and backlit LCD display
- Internal memory recalls maximum, minimum values as well as last value stored
- Low battery indicator and auto shut-off

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Included

- Reflective Tape
- Soft Carrying Case
- Batteries

Specifications

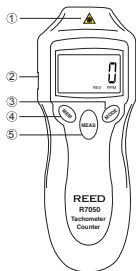
RPM Range (Photo):	2 to 99,999
REV Count Range:	1 to 99,999
Resolution:	0.1 RPM, 1 count
Basic Accuracy:	±0.05%

General Specifications

Visible Indicator:	Yes (Laser)
Target Distance:	1.6' (500mm)
Response Time:	<1 second
Sampling Time:	0.5 sec (over 120 RPM)
Display Size/Type:	5 Digit LCD Display
Backlit Display:	Yes
Auto Shut-off:	Yes (after 10 seconds)
Internal Memory:	Max, Min and Last
Laser Class:	Class III
Low Battery Indicator:	Yes
Power Supply:	9V Battery
Product Certifications:	CE
Operating Temperature:	32 to 122°F (0 to 50°C)
Storage Temperature:	-4 to 140°F (-20 to 60°C)
Operating Humidity Range:	10 to 90%
Dimensions:	6.3 x 2.3 x 1.5" (160 x 58 x 39mm)
Weight:	5.3oz (151g)

Instrument Description

1. Photo Tachometer Laser Sensor
2. Power Adapter Input
3. Mode Button
4. Memory Button
5. Measurement Button



Operating Instructions

Applying Reflective Marking Tape

1. Cut and peel the reflective tape provided into approximately 0.5" (12mm) squares.
2. Apply one square to the surface of the object being measured.
3. The non-reflective area must always be greater than the reflective area.
4. If the shaft or rotating object is normally reflective, it must be covered with black tape or black paint before attaching reflective tape.
5. The surface of the object being measured must be clean and smooth before applying the reflective tape.

RPM Measurement Mode

1. Apply a small piece of reflective tape to the object being measured (see *Applying Reflective Marking Tape* section for details).
2. To select RPM measurement mode, press and release the **MEAS** button to power the meter on and press the **MODE** button until RPM appears on the display.
3. Point the meter towards the target under test at a distance of 2 to 20" (50 to 500mm).
4. Press the **MEAS** button and align the laser light beam to the applied reflective tape.
5. Verify that the measurement indicator appears on the LCD when the reflective tape passes through the light beam as indicated by (||||).
6. When the measurement button is released the last reading will display for 5 to 10 seconds before the meter automatically turns off.

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COUNT Measurement Mode

1. Apply a small piece of reflective tape to the object being measured (see *Applying Reflective Marking Tape* section for details).
2. To select COUNT measurement mode, press and release the **MEAS** button to power the meter on and press the **MODE** button until REV appears on the display.
3. Point the meter towards the target under test at a distance of 2 to 20" (50 to 500mm).
4. Press the **MEAS** button and align the laser light beam to the applied reflective tape.
5. Verify that the measurement indicator appears on the LCD when the reflective tape passes through the light beam as indicated by (||||).
6. When the measurement button is released the last reading will display for 5 to 10 seconds before the meter automatically turns off.

Note: When measuring very low RPM values, it is recommended to attach more reflective tape and take several readings. Divide the combined total by the number of measurements to come up with an average.


Memory Recall

The maximum, minimum and last values obtained prior to releasing the **MEAS** button will automatically be stored in memory.

Press the **MEM** button repeatedly to scroll through the maximum, minimum and last values taken during testing.

Note: All stored values will be erased from memory the next time the **MEAS** button is pressed.

Battery Replacement

1. When the low battery symbol  appears on the display, the batteries need to be replaced.
2. Remove the Phillips screw on the back of the meter.
3. Remove the battery cover.
4. Replace the 9V battery.
5. Secure the battery cover back into place and tighten the screw.

Applications

- Identify issues with rotational equipment such as: Conveyors, Turbines, Compressors, Fans and Blowers
- Automated Assembly and Production Lines
- Count moving product on production line

Accessories and Replacement Parts

CA-05A Soft Carrying Case

R9940 Hard Shell Carrying Case

RT100 Reflective Tape

Don't see your part listed here? For a complete list of all accessories and replacement parts visit your product page on www.reedinstruments.com.

Product Care

To keep your instrument in good working order we recommend the following:

- Store your product in a clean, dry place.
- Change the battery as needed.
- If your instrument isn't being used for a period of one month or longer please remove the battery.
- Clean your product and accessories with biodegradable cleaner. Do not spray the cleaner directly on the instrument. Use on external parts only.

Product Warranty

REED Instruments guarantees this instrument to be free of defects in material or workmanship for a period of one (1) year from date of shipment. During the warranty period, REED Instruments will repair or replace, at no charge, products or parts of a product that proves to be defective because of improper material or workmanship, under normal use and maintenance. REED Instruments total liability is limited to repair or replacement of the product. REED Instruments shall not be liable for damages to goods, property, or persons due to improper use or through attempts to utilize the instrument under conditions which exceed the designed capabilities. In order to begin the warranty service process, please contact us by phone at 1-877-849-2127 or by email at info@reedinstruments.com to discuss the claim and determine the appropriate steps to process the warranty.

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Product Disposal and Recycling



Please follow local laws and regulations when disposing or recycling your instrument. Your product contains electronic components and must be disposed of separately from standard waste products.

Product Support

If you have any questions on your product, please contact your authorized REED distributor or REED Instruments Customer Service by phone at 1-877-849-2127 or by email at info@reedinstruments.com.

Please visit www.REEDINSTRUMENTS.com for the most up-to-date manuals, datasheets, product guides and software.

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