R7200

REED INSTRUMENTS

LED Stroboscope

Instruction Manual

WARRANTY 1 YEAR WARRANTY

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

원문: REED Instruments R7200 사용자 설명서 · 제조사 원문 자료입니다. 사양은 제조사 사정에 따라 변경될 수 있습니다.

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Introduction

Thank you for purchasing your REED R7200 LED Stroboscope. 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 the 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.

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Safety

- Do not use this instrument in any manner inconsistent with these operating instructions or under any conditions that exceed stated environmental specifications.
- **WARNING!** Certain strobe frequencies can trigger epileptic seizures.
- Do not stare directly at the light source.
- Prolonged exposure to the light may cause some people to experience headaches.
- Objects viewed with this product may appear to be stationary when in fact they are moving at high speeds. Always keep a safe distance from moving machinery and do not touch a target.
- Never attempt to repair or modify your instrument. Dismantling your product may cause damage that will not be covered under the manufacturer's warranty. Servicing should only be provided by an authorized service center.

Features

- Bright LEDs with uniform light output
- High accuracy of ±0.001%
- Rechargeable Li-ion battery
- Extended battery life of 8 hours continuous use at 6000FPM/RPM
- Flash rate may be displayed in Flashes per Minute (FPM) or Flashes per Second (Hz)
- Multiplier (x1/x10/x100) push button allows for quick verification of actual RPM
- Easy-to-read LCD display
- Low battery indicator

Includes

- LED Stroboscope
- USB Cable

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Specifications

Measuring Range:	60 to 99,999FPM/RPM
Accuracy:	±0.001%
Resolution:	1FPM/RPM

General Specifications

Display Type:	5-digit LCD
Internal Phase Shift:	Yes
Light Source:	16 LED Array
Selectable Units:	FPM or Hz
Low Battery Indicator:	Yes
Power Supply:	7.4V 2000mAh rechargeable Li-ion battery
Battery Life:	Approx. 8 hours (Fully Charged)
Product Certifications:	CE
Operating Temperature:	14 to 131°F (-10 to 55°C)
Storage Temperature:	-4 to 140°F (-20 to 60°C)
Operating Humidity Range:	10 to 90%
Maximum Operating Altitude:	6561' (2000m)
Dimensions:	8.26 x 3.54 x 2.24" (210 x 90 x 57mm)
Weight:	0.71lbs (320g)

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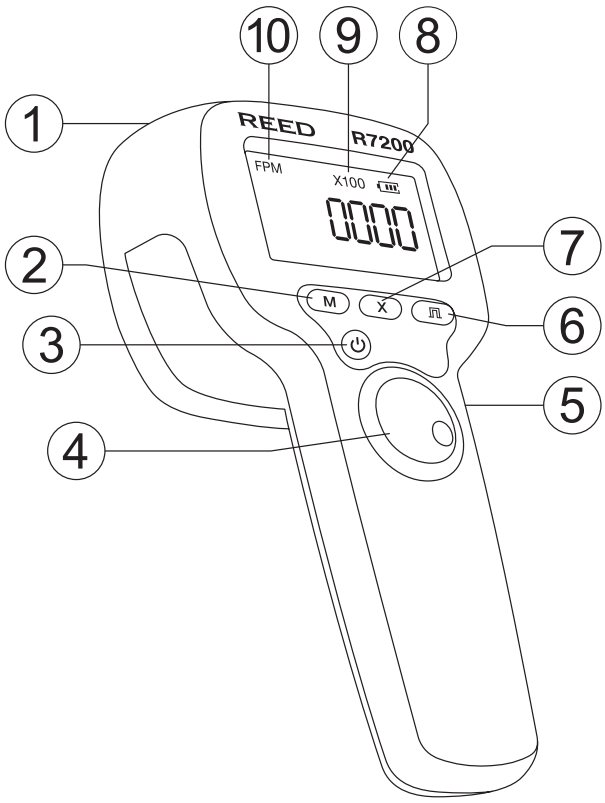
Instrument Description



1. LEDs
2. MODE Button
3. POWER Button
4. Rotary Dial
5. USB Interface
6. COUNTER CLOCKWISE ROTATION Button
7. FLASH OUTPUT SPEED/RESET Button
8. Battery Status Indicator
9. Flash Rate Multiplier Indicator
10. Unit of Measurement

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Operating Instructions

Power ON/OFF

The R7200 is powered by an internal rechargeable battery and should be charged before use. (See the *Charging the Battery* section for further details)

To turn the meter ON or OFF, press the POWER button.

Using the Function Buttons

Mode Button

Press the **M** button to toggle between FPM/HZ modes and LED brightness.

Counter Clockwise Rotation Button

When the object appears to be stationary, press and hold the button to provide the illusion that the object is rotating counter clockwise.

Note: The counter clockwise rotation function is not relevant for monitoring rotational motion from the side (orthogonal to the rotational axis).

Flash Output Speed/Reset Button

Press the **X** button to toggle between x1, x10 and x100 flash rate multipliers. This feature allows a user to increase or decrease the flash output value of the measurement by 1, 10 or 100FPM.

Press and hold the **X** button to reset the flash output rate to 0.

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Measuring Procedure

Rotation Speed Measurement

1. "Mark" the object to be measured by either visually noting an inherent distinguishing characteristic (i.e. label, scratch, etc.) or physically marking the object (i.e. tape, pencil mark, etc.)
2. Direct the strobe LEDs towards the rotating surface of the object being measured observe the light spot and adjust the flash output rate from highest Flashes per Minute (FPM) downward.

Note: The optimal distance between the stroboscope and moving object is approximately 2 feet.

3. If the flash output rate is adjusted to the same rotation speed of the object, the target object will appear to be static or motionless.
4. The true RPM can be noted once the action appears frozen and the first single image of the "mark" appears.

Observing Dynamic Motion (Diagnostic Inspection)

Measure the speed of a moving object as described above and adjust the flash output rate higher and lower to visually inspect all areas of the device for any flaws or defects.

Charging the Battery

1. Connect the R7200 via the included cable to a USB port on your PC or into a wall outlet using a USB Power Adapter (not included) to charge the Li-ion battery.
2. Power the instrument ON to see the battery status indicator.
3. Charge the meter until the battery indicator appears full and remove the charging cable when done.

Applications

Measure speed of moving gears, fans, centrifuges, pumps, motors and other rotational equipment.

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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.

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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