

R5120

REED INSTRUMENTS

Non-Contact Voltage and Magnetic Field Detector



Instruction
Manual



www.REEDInstruments.com

Table of Contents

Introduction	3
Product Quality.....	3
Safety	3
Features.....	4
Included.....	4
Specifications	5
Instrument Description	6
Operating Instructions.....	6-7
<i>Turning the Detector ON/OFF</i>	<i>6</i>
<i>Turning the Flashlight ON/OFF</i>	<i>6</i>
<i>AC Voltage Detection</i>	<i>7</i>
<i>High/Low Voltage Detection Modes.....</i>	<i>7</i>
<i>Magnetic Field Detection Mode</i>	<i>7</i>
<i>Low Battery Indicator</i>	<i>7</i>
<i>Auto Power Off.....</i>	<i>7</i>
Battery Replacement.....	8
Product Care	8
Product Warranty	9
Product Disposal and Recycling	9
Product Support.....	9

Introduction

Thank you for purchasing your REED R5120 Non-Contact Voltage and Magnetic Field Detector. Please read the following instructions carefully before using your instrument. By following the steps outlined in this manual your detector 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.

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.
- Do not use the product if it appears to be damaged or isn't operating properly.
- Do not apply more than the specified voltage.
- Before each use, verify operation by testing a known working circuit that is within the rating of this unit.
- Operation may be affected by differences in socket design and type.
- Low voltage mode (24V AC~1000V AC) is suitable for testing low-voltage motors (< 90V), audio systems, arc welding machines, underground mine lighting, cables with thick insulation, and other weak electromagnetic AC signals.
- High voltage mode (90V AC~1000V AC) is suitable for detecting urban electric supply and three-phase systems such as power distribution units, electrical panels and electrical appliances.

Features

- Check receptacles or insulated wire for presence of AC voltage
- Quickly determine the presence of magnetic fields
- Double insulated housing for increased safety
- Audible (buzzer) and visual (LED) indicators
- Built-in flashlight
- Pocket clip
- Auto shut off
- Cat. IV 1000V safety rating

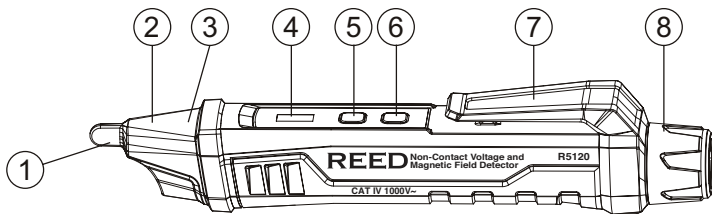
Included

- Batteries

Specifications

Voltage Range:	Low Voltage Mode: 24 to 1000VAC High Voltage Mode: 90 to 1000VAC
Frequency Range:	50 to 60Hz
Magnetic Field Detection:	Yes
Built-in Flashlight:	Yes
Pocket Clip:	Yes
Alarm:	Yes (audio/visual)
Auto Shut-off:	Yes (after 5 minutes)
Drop Tested:	Yes, 6.6' (2m)
Low Battery Indicator:	Yes
Power Supply:	2 x AAA batteries
Overvoltage Category:	CAT. IV 1000V
Product Certifications:	CE, IP67, ETL (Conforms to UL STD 61010-1, 61010-2-030, Certified to CSA STD C22.2 No. 61010-1, 61010-2-030)
Operating Temperature:	32 to 104°F (0 to 40°C)
Storage Temperature:	-4 to 122°F (-20 to 50°C)
Operating Humidity Range:	0 to 80 %
Max. Operating Altitude:	6561' (2000m)
Dimensions:	6.3 x 1 x 0.9" (160 x 25 x 22mm)
Weight:	2.5oz (72g)

Instrument Description



- | | |
|--------------------------------|----------------------|
| 1. NCV Sensor Head | 5. Power Button |
| 2. Flashlight | 6. Flashlight Button |
| 3. Sensing Signal LED | 7. Pocket Clip |
| 4. Mode Status Indicator Light | 8. Battery Cap |

Operating Instructions

Turning the Detector ON/OFF

Press the power button to turn the detector on. The buzzer will beep twice and the red indicator light will illuminate indicating that the detector is on and ready for use. The default voltage detection range is set to High (90 to 1000VAC). Press and hold the power button again to turn the detector off.

Turning the Flashlight ON/OFF

Press the Flashlight button to turn the built-in flashlight ON and OFF. Please note the detector does not need to be powered on for the flashlight to function. The flashlight will automatically turn off when the detector is not used for 5 minutes.

continued...

AC Voltage Detection

Place the NCV sensor head near the test object or the power socket with AC voltage. When AC voltage is detected, the red LED in the tip and audible alarm will turn on.

High/Low Voltage Detection Modes

1. When the detector is powered on the red indicator light on the panel will light up indicating the default voltage detection range is set to High (90 to 1000VAC).
2. Press the power button once and the red indicator light will switch to green indicating the detector is now in Low Voltage Mode (24 to 1000VAC). In low voltage mode, the detector is more sensitive to electrical interference/noise. Please only use low voltage mode during weak electrical field environment.

Magnetic Field Detection Mode

The magnetic field detection function can be used to quickly determine if components are working properly (i.e. Solenoid valves, relays, contactors, permanent magnets, electromagnets, etc.).

To use the magnetic field function, press the power button until the yellow indicator light on the instrument panel lights up. When a magnetic field is detected the buzzer will beep and the indicator light will illuminate.

Low Battery Indicator

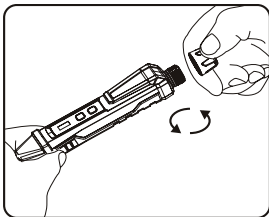
When the battery voltage is lower than 2.4V, the detector will automatically turn OFF.

Auto Power Off

The detector will auto power off when it is not used for 5 minutes.

Battery Replacement

1. Unscrew the battery cap counterclockwise as shown at right picture, and then replace the batteries according to the polarity indication.
2. Tighten the battery cap clockwise and the buzzer will beep twice to indicate the completion of the replacement.



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.

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.

*Product specifications subject to change without notice.
All rights reserved. Any unauthorized copying or reproduction of this manual is strictly prohibited without prior written permission from REED Instruments.*

REED

INSTRUMENTS

TEST & MEASURE WITH CONFIDENCE



CHECK OUT OUR LATEST PRODUCTS!

www.REEDInstruments.com