R5720

REED INSTRUMENTS

AC Leakage Clamp Meter

WARRANTY 1 YEAR WARRANTY

Instruction Manual

REED Instruments

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Introduction

Thank you for purchasing your REED R5720 AC Leakage Clamp Meter. 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.

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 exceed the maximum allowable input range specified for any function.
- Turn the function switch to OFF when the meter is not in use.
- Remove the battery if the meter is stored for over 60 days.
- Always set the function switch to the correct position before measuring.
- Avoid touching exposed metal parts, unused measuring terminals, or circuits to prevent accidental contact.
- Improper use of this meter may result in damage, electric shock, injury, or death. Follow all safety instructions.
- Carefully read and fully understand this user manual before operating the meter.
- Inspect the meter and test leads for any signs of damage before use. Repair or replace damaged components as needed.

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- Exercise extreme caution when measuring voltages exceeding 25V AC RMS or 35V DC. These voltage levels are considered hazardous and pose a risk of electric shock.
- Do not touch the test circuit when no measurement is being made.
- Using the equipment in ways not specified by the manufacturer may compromise the meter's safety protections.
- This instrument is designed for environments with a pollution level of 2. It is suitable for Current measurement applications and devices rated for CAT III 300V.

Electrical Symbols

Symbol	Description
	Equipment protected throughout by double insulation or reinforced insulation
	Warning or Caution
	Alternating current
	Application around and removal from uninsulated hazardhous live conductors is permitted
	Complies with European Union Standards
CAT III	It is applicable to testing and measuring circuits connected to the distribution part of the building's low-voltage mains installation

Features

- Measures AC current from 6mA to 100A
- 6000 count backlit LCD display
- 1.26" (32mm) jaw size opening
- True RMS AC measurements
- Built-in LED flashlight
- Low battery and over range indicators
- Cat. III 300V

Included

- AC Leakage Clamp Meter
- Carrying Case
- Batteries

Specifications

AC TRMS Current

Range:	100.0A, 60.00A, 6.000A, 600.0mA, 60.00mA, 6.000mA
Accuracy (50/60Hz):	100.0A, 60.00A: ±(1.5% rdg. +8 dgt.) 6.000A, 600.0mA, 60.00mA: ±(1.0% rdg. +5 dgt.) 6.000mA: ±(1.0% rdg. +8 dgt.)
Accuracy (>60Hz<1kHz):	100.0A: ±(3.5% rdg. +8 dgt.) 60.00A: ±(3.0% rdg. +8 dgt.) 6.000A, 600.0mA, 60.00mA: ±(3.0% rdg. +5 dgt.) 6.000mA: ±(3.0% rdg. +8 dgt.)
Resolution:	100mA, 10mA, 1mA, 0.1mA, 10µA, 1µA

AC TRMS Current with Low Pass Filter (LPF)

Range:	100.0A, 60.00A, 6.000A, 600.0mA, 60.00mA, 6.000mA
Accuracy (50/60Hz):	100.0A: ±(2.0% rdg. +8 dgt.) 60.00A, 6.000A, 600.0mA, 60.00mA, 6.000mA: ±(1.5% rdg. +8 dgt.)
Resolution:	100mA, 10mA, 1mA, 0.1mA, 10µA, 1µA

General Specifications

AC Frequency	50Hz to 1kHz
Range Selection	Manual
Over Range Indication	Yes ("OL")
True RMS	Yes
Low Pass Filter (LPF)	Yes
Display	6000 count LCD display
Backlit Display	Yes
Display Hold	Yes
Peak Max/Min	Yes
Integrated Flashlight	Yes

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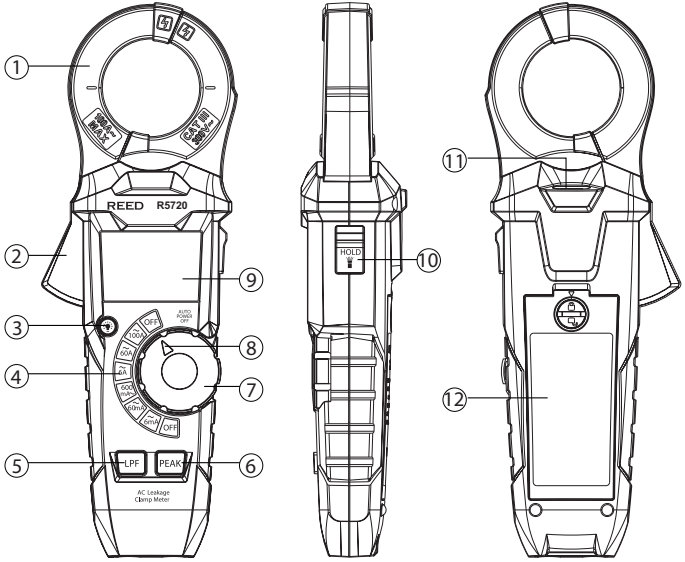
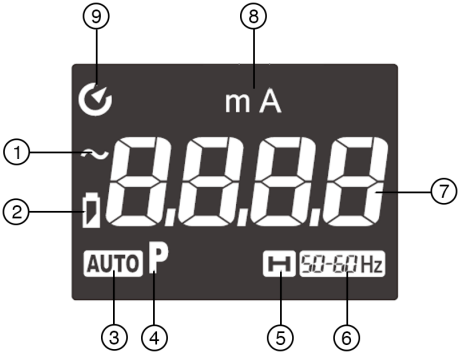
Autoshut off	Yes (after 15 mins)
Power Supply	3 x AAA Batteries
Low Battery Indicator	Yes
Jaw Opening	1.26" (32mm)
Overvoltage Category	CAT. III 300V
Product Certifications	CE
Operating Temperature	41 to 104°F (5 to 40°C)
Storage Temperature	-4 to 140°F (-20 to 60°C)
Dimensions	9.1 x 3.0 x 1.5" (232 x 77 x 39 mm)
Weight	9.6oz (271g)

Instrument Description



1. Clamp Jaw
2. Trigger
3. BACKLIGHT Button
4. Measurement Functions
5. **LPF** Button
6. **PEAK** Button
7. Function Dial
8. Function Indicator Light
9. LCD Display
10. **HOLD**/FLASHLIGHT Button
11. Flashlight
12. Battery Cover

Display Description



1. Alternating Current Indicator
2. Low Battery Status Indicator
3. Auto Range Indicator
4. Peak Status Indicator
5. Data Hold Indicator
6. Low Pass Filter (LPF) Status Indicator
7. Measured Value
8. Current Measurement Indicator
9. Auto Power OFF Indicator

Operation Instructions

Power ON/OFF

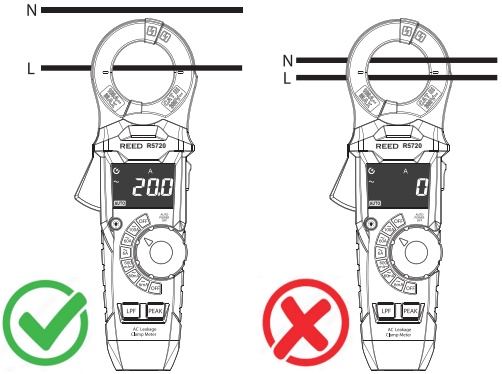
Rotate the function dial to any position to power on the meter. If the meter does not turn on, check the batteries. For details on battery replacement, refer to section "Battery replacement" for details.

AC Current Measurement

1. Set the function dial to the appropriate measurement range: 6mA, 60mA, 600mA, 6A, 60A, or 100A.

Note: The current to be measured should fall within the selected range. If unsure, start with the highest range, then move to lower ranges for more precise readings.

2. Press the trigger to open the clamp jaws.
3. Fully enclose only one conductor in the clamp jaws. For optimal accuracy, ensure the conductor is centered within the jaws.
4. The measured AC current will be displayed on the clamp meter's LCD screen.
5. Adjust ranges or settings as needed for clarity or accuracy.



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Additional Notes: Avoid clamping multiple conductors simultaneously, as this may affect the accuracy of the measurement.

Ensure the jaws are fully closed and properly aligned around the conductor for consistent results.

Measuring Leakage Current of a Single or Three Phase Load Conductor

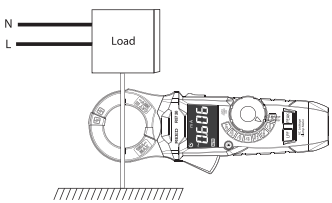
Leakage current may be measured on a ground conductor and through the vector sum on multiconductors. Clamp around the two or three conducting legs (not the ground conductor) on a grounded system. The vector sum of the load currents will cancel out, leaving the leakage current measured.

1. Set the function dial to the appropriate measurement range: 6mA, 60mA, or 600mA.

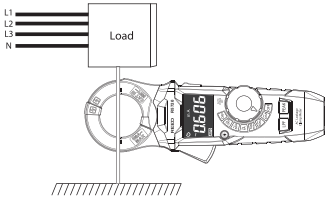
Note: The current to be measured should fall within the selected range. If unsure, start with the highest range, then move to lower ranges for more precise readings.

2. Press the trigger to open the clamp jaws.
3. Fully enclose the load conductor in the clamp jaws. For optimal accuracy, ensure the conductor is centered within the jaws.
4. The LCD will display the measured leakage current.
5. Adjust ranges or settings as needed for clarity or accuracy.

Single Phase System



Three Phase System

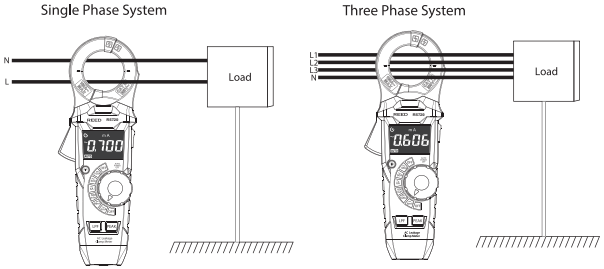


Measuring Leakage Current of a Single or Three Phase System

1. Set the function dial to the appropriate measurement range: 6mA, 60mA, or 600mA.

Note: The current to be measured should fall within the selected range. If unsure, start with the highest range, then move to lower ranges for more precise readings.

2. Press the trigger to open the clamp jaws.
3. Fully enclose the live and neutral conductors in the clamp jaws. For optimal accuracy, ensure the conductors are centered within the jaws.
4. The LCD will display the measured leakage current.
5. Adjust ranges or settings as needed for clarity or accuracy.



Low-Pass Filter (LPF) Mode

The Low-Pass Filter (LP) mode allows the meter to ignore all currents except those at 50/60 Hz. When activated, only the fundamental signal is measured.

To activate and use LPF mode:

1. Press the **LPF** Button to activate the Low-Pass Filter function.
2. The display will show "50-60 Hz", indicating that the meter is in LPF mode.
3. To exit LPF mode and return to normal operation, press the **LPF** Button again.

Note: While the meter is in LPF mode, the Auto Power-Off function will be disabled.

Data Hold

1. While taking a measurement, press the **HOLD** button to freeze the current reading on the display.
2. While in this mode, an "H" symbol will appear.
3. Press the **HOLD** button again to exit and resume normal operation.

Peak Mode

Use this feature to monitor the highest and lowest current levels during testing.

Press the **PEAK** Button to activate the peak measurement function. The device will measure and display the AC current's peak maximum and minimum values.

Auto Power Off

1. To preserve battery life, the meter is programmed to turn off after approx. 15 minutes of inactivity.
2. To turn this function off, press and hold the **LPF** button while powering on the meter.
3. If the meter is turned off then back on, the "Auto Power Off" feature will be enabled again.

Function Dial Backlight

1. The function dial backlight turns on automatically when the meter is powered on.
2. To toggle the function dial backlight, press the **BACKLIGHT** button once to turn the backlight off.
3. Press the **BACKLIGHT** button again to turn the backlight on.

Flashlight

Press and hold the **HOLD/Flashlight** button to turn the flashlight on or off.

Battery Replacement

1. When the low battery status indicator appears on the LCD, you will need to replace the batteries.
2. Rotate the Battery Door Lock 180 degrees to open the battery door.
3. Replace the 3x1.5V AAA batteries.
4. Secure the battery compartment back into place.

Applications

• Measuring leakage current in electrical circuits and systems

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.