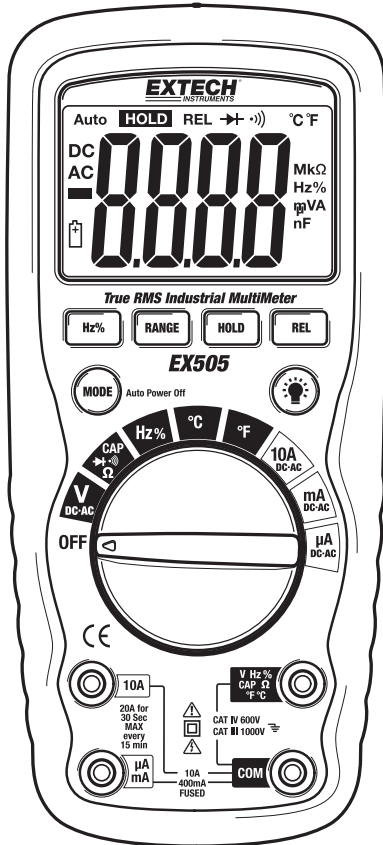


# EXTECH<sup>®</sup> INSTRUMENTS

## Autoranging True RMS Multimeter

### Extech EX505



CE

## ***Introduction***

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## ***Safety***

---



**WARNING**

**WARNING**

**CAUTION**

**CAUTION**



**PER IEC1010 OVERVOLTAGE INSTALLATION CATEGORY  
OVERVOLTAGE CATEGORY I**

*OVERVOLTAGE CATEGORY II*

*OVERVOLTAGE CATEGORY III*

*OVERVOLTAGE CATEGORY IV*



**SAFETY INSTRUCTIONS**

**NEVER**


**USE EXTREME CAUTION**

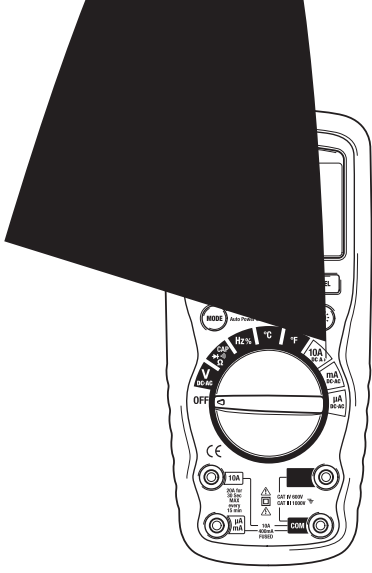
**DO NOT**

**NEVER**

**ALWAYS**

**ALWAYS**

**NEVER**



## Operating Instructions

WARNING

OFF

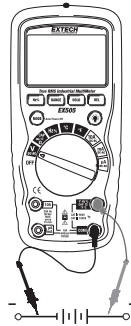
OL

### DC VOLTAGE MEASUREMENTS

CAUTION:

V

V COM



### AC VOLTAGE (FREQUENCY, DUTY CYCLE) MEASUREMENTS

WARNING:

CAUTION:

V

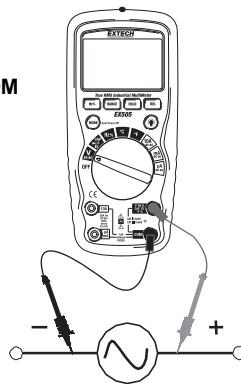
V COM

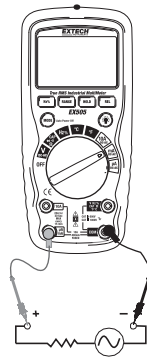
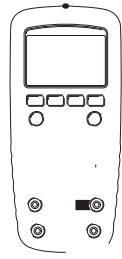
HZ/%

Hz

Hz/%

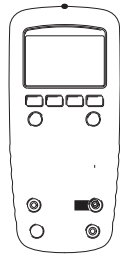
%











FREQUENCY SENSITIVITY (ELECTRICAL)

	≅	
	≅	
	≅	
	≅	
	≅	
	≅	


AUTORANGING/MANUAL RANGE SELECTION

RANGE            Auto”  
RANGE

RANGE  
Note:  
RELATIVE MODE

REL

REL

Note:  
REL  
DISPLAY BACKLIGHT  


HOLD

HOLD

AUTO POWER OFF

MODE  
LOW BATTERY INDICATION



## **Maintenance**

---

**WARNING**

**WARNING:**

**KEEP THE METER DRY**

**USE AND STORE THE METER IN NORMAL TEMPERATURES.**

**HANDLE THE METER GENTLY AND CAREFULLY.**

**KEEP THE METER CLEAN.**

**USE ONLY FRESH BATTERIES OF THE RECOMMENDED SIZE AND TYPE.**

**IF THE METER IS TO BE STORED FOR A LONG PERIOD OF TIME**

## **BATTERY INSTALLATION**

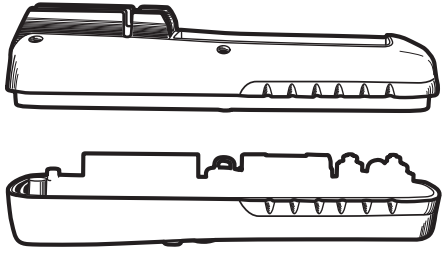
**WARNING**



**Battery ordinance  
disposal in the household garbage is prohibited!**

## **Disposal**





**Specifications**


			±
			±
			±
			±
			±
			±
	μ	μ	±
	μ	μ	±
			±
	μ	μ	±
	μ	μ	±
			±

**NOTE:**

Function	Range	Resolution	Accuracy
	$\Omega$	$\Omega$	$\pm$
	$\Omega$	$\Omega$	$\pm$
	$\Omega$	$\Omega$	$\pm$
	$\Omega$	$\Omega$	
	$\Omega$	$\Omega$	$\pm$
	$\Omega$	$\Omega$	$\pm$
			$\pm$
			$\pm$
	$\mu$	$\mu$	$\pm$
	$\mu$	$\mu$	
	$\mu$	$\mu$	$\pm$
			$\pm$
			$\pm$
			$\pm$
			$\pm$
			$\pm$
			$\pm$
	$\circ$	$\circ \quad \circ$	$\pm$
	$\circ$	$\circ \geq \circ$	

Note:

- 
-

<b>Enclosure</b>	Double molded, waterproof (IP67)
<b>Shock (Drop Test)</b>	6.5 feet (2 meters)
<b>Diode Test</b>	Test current of 0.3mA typical, open circuit voltage 1.5V DC typical
<b>Continuity Check</b>	Audible signal will sound if the resistance is less than 100Ω (approx.), test current <0.3mA
<b>Temperature Sensor</b>	Requires type K thermocouple
<b>Input Impedance</b>	7.8MΩ
<b>AC Response</b>	True rms
<b>ACV Bandwidth</b>	40Hz to 400Hz
<b>Crest Factor</b>	≤3 at full scale up to 500V, decreasing linearly to ≤1.5 at 1000V
<b>Display</b>	4,000 count backlit liquid crystal
<b>Overrange indication</b>	"OL" is displayed
<b>Auto Power Off</b>	30 minutes (approximately)
<b>Polarity</b>	Automatic (no indication for positive); Minus (-) sign for negative
<b>Measurement Rate</b>	2 times per second, nominal
<b>Low Battery Indication</b>	"  " is displayed if battery voltage drops below operating voltage
<b>Battery</b>	One 9 volt (NEDA 1604) battery
<b>Fuses</b>	mA, μA ranges; 0.5A/1000V ceramic fast blow A range; 10A/1000V ceramic fast blow
<b>Operating Temperature</b>	41°F to 104°F (5°C to 40°C)
<b>Storage Temperature</b>	-4°F to 140°F (-20°C to 60°C)
<b>Operating Humidity</b>	Max 80% up to 87°F (31°C) decreasing linearly to 50% at 104°F (40°C)
<b>Storage Humidity</b>	<80%
<b>Operating Altitude</b>	7000ft. (2000meters) maximum.
<b>Weight</b>	0.753lb (342g) (includes holster).
<b>Size</b>	7.2" x 3.2" x 2.2" (182 x 82 x 55mm)
<b>Safety</b>	This meter is intended for origin of installation use and protected, against the users, by double insulation per EN61010-1 and IEC61010-1 2 <sup>nd</sup> Edition (2001) to Category IV 600V and Category III 1000V; Pollution Degree 2. The meter also meets UL 61010-1, 2 <sup>nd</sup> Edition (2004), CAN/CSA C22.2 No. 61010-1 2 <sup>nd</sup> Edition (2004), and UL 61010B-2-031, 1 <sup>st</sup> Edition (2003)
<b>Approvals</b>	UL CE
<b>UL Listed</b>	The UL mark does not indicate that this product has been evaluated for the accuracy of its readings.

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**airconcern**

more info for Extech EX505

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