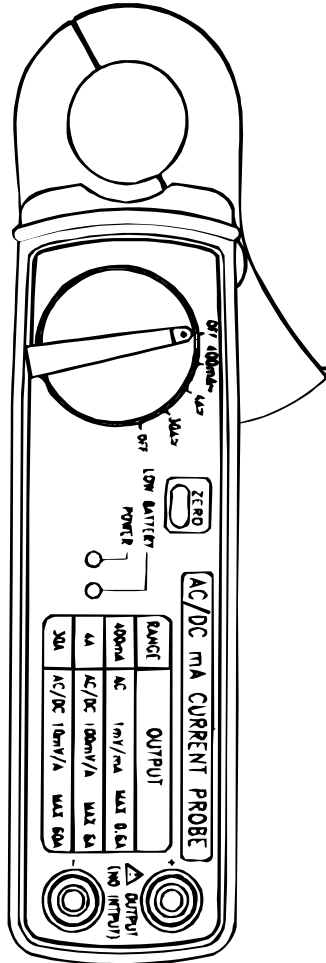


# User's Guide



## DCA/ACA CLAMP-ON MULTIMETER ADAPTOR

Model 380946



### Introduction

Congratulations on your purchase of Extech's 30 Amp AC/DC Clamp-On MultiMeter Adaptor. There is no need to break circuits when measuring current with a clamp device, simply open the meter jaw and clamp around the conductor under test. Current is displayed on the external DMM that is connected to the Adaptor.

## Specifications

DC Ranges		Output	Accuracy	
400mA DC		1mV/mA DC	Not specified <sup>1</sup>	
4A DC		100mV/A	$\pm(2.0\%+3mA)$	
30A DC		10mV/A	$\pm(2.0\%+30mA)$	
AC Ranges			50/60Hz	40 to 100Hz
400mA AC		1mV/mA AC	$\pm(2.0\%+0.5mA)$	$\pm(2.5\%+0.5mA)$
			50/60Hz	40 to 400Hz
4A AC (0 to 400mA)		100mV/A AC	$\pm(2.5\%+8mA)$	$\pm(3.0\%+8mA)$
4A AC (400 to 4A)		100mV/A AC	$\pm(2.5\%+3mA)$	$\pm(3.0\%+6mA)$
30A AC		10mV/A AC	$\pm(2.0\%+30mA)$	$\pm(2.5\%+30mA)$

Notes: Accuracy stated at 23°C  $\pm$ 5°C  
<sup>1</sup> The 400mA range is specified for AC measurements only. For DC measurements on this range the typical accuracy is  $\pm(2.5\%+1mA)$  and the last digit may drift  $\pm$  4 counts.

Range	DMM display
400mA	0.1mV / 0.1mA (400mA = 40.0mV)
4A	0.1mV / 1mA (4A = 400mV)
30A	0.1mV / 10mA (30A = 300mV)

<b>Jaw size</b>	0.9" (23mm) max
<b>Power</b>	2 1.5V AA batteries
<b>Low Battery indication</b>	Red LED
<b>Power consumption</b>	10mA (approximately)
<b>Operating Temperature:</b>	14° to 122°F (-10 to 50°C), <85% R.H.
<b>Storage Temperature:</b>	-4° to 140°F (-20 to 60°C), <75% R.H.
<b>Relative Humidity:</b>	80% to 88°F (31°C), decreasing linearly to 50% at 104°F (40°C)
<b>Altitude:</b>	Operating below 2000 meters
<b>Dimensions:</b>	7.2 x 2.5 x 1.4" (183 x 61.3 x 35.6mm)
<b>Weight:</b>	6.7oz (190g)

## Safety

### Safety Symbols



This symbol, adjacent to another symbol or terminal, indicates the user must refer to the manual for further information.



This symbol, adjacent to a terminal, indicates that, under normal use, hazardous voltages may be present

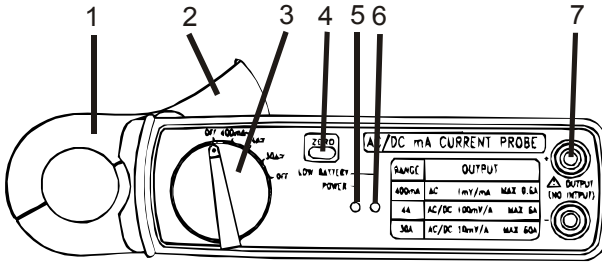
**WARNING:** This indicates that a potentially hazardous condition which, if not avoided, could result in death or serious injury.

**CAUTION:** This indicates that a potentially hazardous condition which, if not avoided, could result in injury or damage to the meter.

### Safety Precautions

- WARNING:** Improper use of this meter can cause damage, shock, injury or death. Read and understand this user's manual before operating the meter.
- Make sure any covers or battery doors are properly closed and secured.
- Use great care when making measurements if the voltages are greater than 25VAC rms or 35VDC. These voltages are considered a shock hazard.
- Remove the battery if the adaptor is to be stored for long periods.

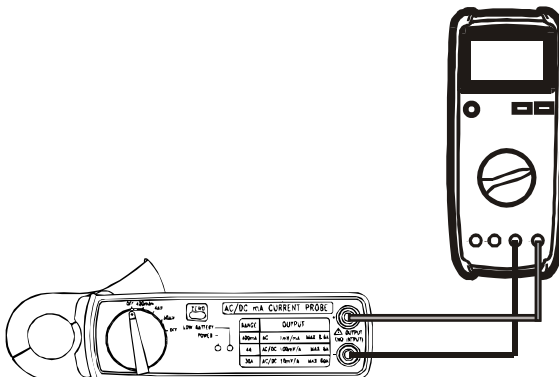
## Panel Description



- 1 Transformer jaw
- 2 Jaw trigger
- 3 On/Off and range selection switch
- 4 Zero button
- 5 Power-On LED
- 6 Low battery LED
- 7 Output terminals

## Current Measurements

1. Set the DMM to the mV or low voltage range (ACV for AC measurements or DCV for DC measurements).
2. Determine the highest anticipated reading and set the range accordingly. Start with the 30A range if unsure.
3. Connect the RED connector lead to the multimeter's '+' Voltage terminal and the BLACK lead to the '-' Common terminal.
4. For DC measurements, hold the adaptor in the same orientation as it will be held during the measurement and press the Zero button (No conductor in the jaw).
5. Press the Jaw Trigger to open the jaw and clamp around a single conductor.
6. Read the Current on the DMM display.



## ***Battery Replacement***

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When the low battery status LED indicator lights, the meter's batteries must be changed. Open the rear battery compartment, replace the batteries, and close the compartment cover.

## ***Warranty***

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EXTECH INSTRUMENTS CORPORATION warrants the basic instrument to be free of defects in parts and workmanship for one year from date of shipment (a six month limited warranty applies on sensors and cables). If it should become necessary to return the instrument for service during or beyond the warranty period, contact the Customer Service Department at (781) 890-7440 for authorization. A Return Authorization (RA) number must be issued before any product is returned to Extech. The sender is responsible for shipping charges, freight, insurance and proper packaging to prevent damage in transit. This warranty does not apply to defects resulting from action of the user such as misuse, improper wiring, operation outside of specification, improper maintenance or repair, or unauthorized modification. Extech specifically disclaims any implied warranties or merchantability or fitness for a specific purpose and will not be liable for any direct, indirect, incidental or consequential damages. Extech's total liability is limited to repair or replacement of the product. The warranty set forth above is inclusive and no other warranty, whether written or oral, is expressed or implied.

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