**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.

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# Specifications

| DC Ranges                        | Output     | Accuracy                   |               |
|----------------------------------|------------|----------------------------|---------------|
| 400mA DC                         | 1mV/mA DC  | Not specified <sup>1</sup> |               |
| 4A DC                            | 100mV/A    | ±(2.0%+3mA)                |               |
| 30A DC                           | 10mV/A     | ±(2.0%+30mA)               |               |
| AC Ranges                        |            | 50/60Hz                    | 40 to 100Hz   |
| 400mA AC                         | 1mV/mA AC  | ±(2.0%+0.5mA)              | ±(2.5%+0.5mA) |
|                                  |            | 50/60Hz                    | 40 to 400Hz   |
| 4A AC (0 to 400mA)               | 100mV/A AC | ±(2.5%+8mA)                | ±(3.0%+8mA)   |
| 4A AC (400 to 4A)                | 100mV/A AC | ±(2.5%+3mA)                | ±(3.0%+6mA)   |
| 30A AC                           | 10mV/A AC  | ±(2.0%+30mA)               | ±(2.5%+30mA)  |
| Materia A course out stated at 0 |            |                            |               |

Notes: Accuracy stated at 23°C ±5°C

The 400mA range is specified for AC measurements only. For DC measurements on this range the typical accuracy is  $\pm (2.5\% + 1 \text{ mA})$  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)     |  |

| 0.9" (23mm) max  |
|--|
| 2 1.5V AA batteries  |
| Red LED  |
| 10mA (approximately)   |
| 14° to 122°F (-10 to 50°C), <85% R.H.                          |
| -4° to 140°F (-20 to 60°C), <75% R.H.                          |
| 80% to 88°F (31°C), decreasing linearly to 50% at 104°F (40°C) |
| Operating below 2000 meters                                    |
| 7.2 x 2.5 x 1.4" (183 x 61.3 x 35.6mm)                         |
| 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

- 1. WARNING: Improper use of this meter can cause damage, shock, injury or death. Read and understand this user's manual before operating the meter.
- 2. Make sure any covers or battery doors are properly closed and secured.
- Use great care when making measurements if the voltages are greater than 3. 25VAC rms or 35VDC. These voltages are considered a shock hazard.
- Remove the battery if the adaptor is to be stored for long periods. 4.

# **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**

- Set the DMM to the mV or low voltage range (ACV for AC measurements or DCV for DC measurements).
- 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.







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