

# OPERATING INSTRUCTIONS



**CA30**  
AC/DC  
CLAMP-ON ADAPTER



Universal Enterprises, Inc.

## Introduction

The CA30 clamp-on adapter is designed to measure AC and DC current. It can be used with most digital multimeters having a 200mV and 2V AC/DC or 400mV AC/DC range.

## Specifications

### Features

- Measure 0-40 amps and 0-400 amps AC or DC
- Low battery indication
- DC amp zero adjust knob

### Measuring Ranges

**AC Amps** 0 - 40A on 200mV or 400mV AC range  
0 - 400A on 2V or 400mV AC range

**DC Amps** 0 - 40A on 200mV or 400mV DC range  
0 - 400A on 2V or 400mV DC range

### Output

**AC Amps** 1mV AC per 1A AC  
**DC Amps** 1mV DC per 1A DC

### Output

**AC Amps** 1mV AC per 1A AC  
**DC Amps** 1mV DC per 1A DC

### Accuracy

**40A:** +/- (1.5% of reading + 2 least significant digits)  
**400A:** +/- (1.5% of reading + 4 least significant digits)

### Operating Temperature

+32°F to 122°F (0°C to 50°C)

### Accessories

9V Battery ..... AB9  
110V AC Line Splitter ..... ALS1

## Measuring AC Current

1. Observing the polarity markings on the CA30 connector, plug the test lead into the input jacks on your digital multimeter. The "-" on the CA30 connector plugs into the "COM" jack and the "+" plugs into the "V/ $\Omega$ " jack on your multimeter.
2. Set your digital multimeter to one of the following ranges:  
200mV AC for measuring 0 to 40ACA  
2V AC for measuring 0 to 400ACA  
400mV AC for measuring 0 to 40 or 0 to 400ACA
3. Clamp the jaw of the CA30 around a single current carrying wire.  
**NOTE:** Clamp around only one wire at a time. If the CA30 is clamped around two or more wires it will not work properly.
4. Take the reading directly from the digital multimeter's display.  
**NOTE:** 1mV = 1A.

5. Take the reading directly from the digital multimeter's display.  
**NOTE:** 1mV = 1A.

## Measuring DC Current

1. Observing the polarity markings on the CA30 connector, plug the test lead into the input jacks on your digital multimeter. The "-" on the CA30 connector plugs into the "COM" jack and the "+" plugs into the "V/W" jack on your multimeter.
2. Set your digital multimeter to one of the following ranges:  
200mV DC for measuring 0 to 40DCA  
2V DC for measuring 0 to 400DCA  
400mV DC for measuring 0 to 40 or 0 to 400DCA
3. Turn the CA30 to the 40 or 400 range. Turn the zero adjust knob on the CA30 until the display on the multimeter reads zero.
4. Clamp the jaw of the CA30 around a single current wire.  
**NOTE:** Clamp around only one wire at a time. If the CA30 is clamped around two or more wires it will not work properly.

## Returning for Repair

Before returning your CA30 for repair, please check to ensure the failure is not due to one or more of the following:

1. Low or dead battery.
2. Digital multimeter is not set on the correct range.
3. Test lead is plugged into the correct input jacks on the multimeter.



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## Low Battery Indication

When the low battery indicator illuminates, replace the battery as soon as possible. A low battery can adversely affect readings.