

# Owner's Guide



## Model TK34

### General Purpose Electrical HVAC MultiMeter Test Kit



## Introduction

Congratulations on your purchase of the Extech Model TK34 MultiMeter Test Kit. This kit is housed in a lightweight protective case and includes a MultiMeter, Clamp On Adaptor, Voltage Detector, Line Splitter, Temperature Probe, and Cables. Operation instructions for these units are detailed in the supplied manuals and are beyond the scope of this guide.

## Kit Contents

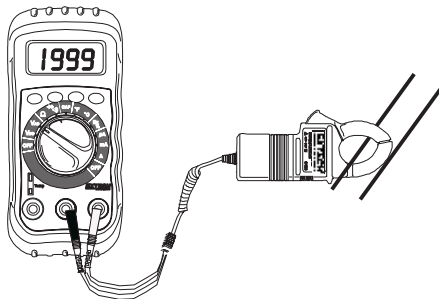
- Model MN26 MultiMeter
- Model CA330 300A AC Current Clamp
- Model 480172 AC Line Splitter
- Model 40130 Non-Contact Voltage Detector
- Set of 1000V Category III test leads
- Type K thermocouple temperature probe
- Model CA900 Carrying Case
- Owner's Guides for models MN26, CA300 and TK34

## Current Clamp with MultiMeter

The Current Clamp connects to the MultiMeter as shown and can be used to measure current for the ranges listed in the Current Clamp's specifications.

### Operation

1. Connect the Current Clamp test leads to the COM and V inputs of the MultiMeter.
2. Set the MultiMeter to the **Vac** function range
3. Press the RANGE button until the milliVolt range is selected ("m V" appears in the display).
4. If the anticipated current is less than 10A, zero the meter using the Relative button. (see zeroing note)
5. Clamp around the conductor under test and read the current measurement on the meter's LCD.
6. The Clamp outputs 1mV AC for each Ampere of current measured.



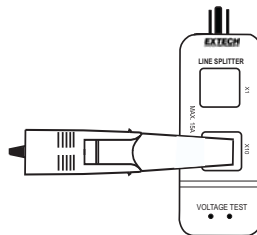
**Note:** The zero offset voltage is approximately 3mV and this voltage is not linear. The offset will affect low current measurements, but will have little affect on high current measurements. For the best measurement accuracy, press the Relative button to zero the meter for currents <10A. Do not zero the meter for currents higher than 10A.

Interpreting the Display	
Display	Current
005.0 mV	5 amps
020.0 mV	20 amps
250.0 mV	250 amps

## Current Clamp and Line Splitter

### Line Splitter

The supplied Line Splitter provides a means to cleanly “open” a standard 120V line cord in order to make clamp type current measurements. When connected between the 120V AC wall outlet and the device under test, the Current Clamp can then be clamped on one of the two test openings in the Splitter. One opening provides a one-to-one current reading and the other provides a times-ten (X10) reading so that small current will display with better resolution on the MultiMeter.



### Line Splitter Operation:

#### Current Measurements

1. Plug the AC Line Splitter into the 120V receptacle
2. Plug the line cord from the load into the AC Line Splitter socket
3. Close the Clamp-on jaws around either the X1 or X10 arm of the AC Line Splitter
4. If the X1 position is used, read the current directly on the meter
5. If the X10 position is used, divide the meter reading by 10 to obtain the actual current

#### Voltage Measurements

1. Plug the AC Line Splitter into the 120V receptacle
2. Insert the multimeter test leads into the two Voltage Test jacks
3. Read the voltage on the multimeter



### Support Hotline (781) 890-7440

Tech support: Ext. 200; Email: [support@extech.com](mailto:support@extech.com)

Repair>Returns: Ext. 210; Email: [repair@extech.com](mailto:repair@extech.com)

Website: [www.extech.com](http://www.extech.com)

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