

## **Instruction Manual**

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**Model 301 AC Line Separator**



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# 1. Product Introduction

## 1-1 Features

- X10 Mode allows for more accurate measurements of low amperage devices
- Direct reading in X1 mode
- 2mm Voltmeter measurement points
- Integrated ground conductor (three pronged US standard plug)
- 15 amp capacity

## 1-2 Applications

- Monitor a devices power consumption
- Measure surge currents





## 2. Safety Information

Read the following safety information carefully before attempting to operate or service the meter. Only qualified personnel should perform repairs or servicing not covered in this manual.

### 2-1 Cautions!

- **DO NOT** submerge the products mentioned in this manual in water or any other types of liquids.
- This product is not designed for use in medical applications. The product can only be used to measure body temperature simply for reference.

### 2-2 Safety Symbols

-  Dangerous, refer to this manual before using the meter.
-  Conforms to requirements of European Union and European Free Trade Association (EFTA).
-  Battery level is low.
-  Don't dispose this product as unsorted municipal waste.

## 5. Specifications

Input/Output Line Connector	Three Prong US Standard
Maximum Volt/Ampere Rating	120Vac ( $\pm 10\%$ ) / 15Aac
Operating Environment	32° to 122°F (0° to 50°C), <85% R.H.
Weight (approx.)	19.5 oz.. (553g)
Dimensions (approx.)	6.14 x 1.1 x 2.1" (156 x 28 x 53mm)
Included Accessories	Instruction manual

Specifications and information are subject to change without notice  
Please visit [www.bkprecision.com](http://www.bkprecision.com) for the most current product information.

## 4. Operation Instructions

The 301 is intended to be used with an AC Current Clamp Meter. It provides temporary separation of conductors to facilitate measurement of current. Most 120Vac devices use a two conductor power cord which makes it difficult to isolate a single conductor to make a current measurement. A single conductor is required to make a measurement because a two conductor measurement will cancel each other out.

### 4-1 Unit Diagram

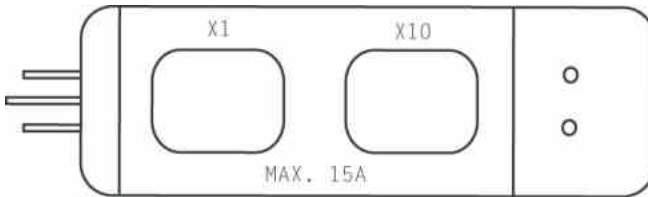


Fig. 1

### 4-2 Measuring Procedure

Clamp a current clamp meter around the X1 or X10 measurement points to measure the amount of current flowing through an outlet. The X1 measurement point will give you the actual amount. Use the X10 measurement point for low current measurements and divide the reading on the meter by 10 to get the actual amount of current. The "Volt Check" points are to be used with a DMM's 2 mm test probes to see the amount of voltage present. CAUTION: There can be hazardous and possibly fatale power at this point so use caution when measuring.

## 5. Service Information

**Warranty Service:** Please return the product in the original packaging with proof of purchase to the address below . Clearly state in writing the performance problem and return any leads, probes, connectors and accessories that you are using w ith the device.

**Non-Warranty Service:** Return the product in the original packaging to the address below . Clearly state in w riting the performance problem and return any leads, probes, connectors and accessories that you are using w ith the device. Customers not on open account must include payment in the form of a money order or credit card. For the most current repair charges please visit [www.bkprecision.com](http://www.bkprecision.com) and click on “service/repair”.

Return all merchandise to B&K Precision w ith pre-paid shipping. The flat-rate repair charge for Non-Warranty Service **does not** include return shipping. Return shipping to locations in North A merican is included for Warranty Service only. For overnight shipments and non-North American shipping fees please contact B&K Precision.

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714-921-9095

**Include with the returned instrument your complete return shipping address, contact name, phone number and description of problem .**

## 6. Limited One-Year Warranty

B&K Precision warrants to the original purchaser that its products and the component parts thereof, will be free from defects in workmanship and materials for a period of one year from date of purchase from an authorized B&K Precision distributor.

B&K Precision will, without charge, repair or replace, at its option, defective product or component parts. Returned product must be accompanied by proof of the purchase date in the form of a sales receipt.

To obtain warranty coverage in the U.S.A., this product must be registered by completing the warranty registration form on [www.bkprecision.com](http://www.bkprecision.com) within fifteen (15) days of purchase.

**Exclusions: This warranty does not apply in the event of misuse or abuse of the product or as a result of unauthorized alterations or repairs. The warranty is void if the serial number is altered, defaced or removed.**

B&K Precision shall not be liable for any consequential damages, including without limitation damages resulting from loss of use. Some states do not allow limitations of incidental or consequential damages. So the above limitation or exclusion may not apply to you.

This warranty gives you specific rights and you may have other rights, which vary from state-to-state.

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