

CT3197B
User Manual

CT3197B HV Probe BNC Converter User Manual

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Safety Summary

To avoid personal injury and/or product damage, review and comply with the following safety precautions. These precautions apply to both operating and maintenance personnel and must be followed during all phases of operation, service, and repair of this probe.



A **WARNING** statement calls attention to an operating procedure, practice, or condition, which, if not followed correctly, could result in injury or death to personnel.



A **CAUTION** statement calls attention to an operating procedure, practice, or condition, which, if not followed correctly, could result in damage to or destruction of parts or the entire product.

Do Not Work Alone

Do not work alone when working with high voltages.

Dry Conditions

Hands, shoes, floor, and work bench must be dry. Avoid making measurements under humidity, dampness, or other environmental conditions that might affect safety.

Hazardous Contact

To avoid injury, remove jewelry such as rings, watches, and other metallic objects. Do not touch exposed connections and components when power is present.

Use Only in Office-Type Indoor Setting

The converter is designed to be used in office-type indoor environments. Do not operate high voltage probes:

- In the presence of noxious, corrosive, flammable fumes, gases, vapors, chemicals, or finely-divided particulates.
- In environments where there is a danger of any liquid being spilled on the probe.
- In air temperatures exceeding the specified operating temperatures.
- In atmospheric pressures outside the specified altitude limits or where the surrounding gas is not air.

Only Qualified Personnel

This converter is intended for personnel who are trained, experienced, or otherwise qualified to recognize hazardous situations and who are trained in the safety precautions necessary to avoid possible injury when using such a device.

Observe Maximum Working Voltage

Do not use this converter with any probe above its maximum working voltage ranges.

Must be Grounded


Do not rely on this converter for high voltage probe grounding. Always properly ground the high voltage probe with its ground lead before connecting to high voltage circuits. Always disconnect the probe from high voltage circuits before disconnecting the ground lead. Do not connect the probe ground lead to any point which is at a potential other than earth ground.

Cleaning

Use a soft cotton cloth lightly moistened with a mild solution of detergent and water. Do not allow any portion to be submerged at any time. Dry thoroughly before attempting to make voltage measurements. Do not use solvents or solvent fumes as they may cause deterioration or damage.

Compliance Statements

EC Declaration of Conformity

 The product conforms to the applicable European Union requirements per the Low Voltage Directive (LVD) 2014/35/EU. Compliance was demonstrated to the following specification as listed in the official Journal of the European Communities:

IEC/EN 601010-031:2015 Safety requirements for electrical equipment for measurement, control and laboratory use. Part 031: Safety requirements for hand-held probe assemblies for electrical measurement and test.

EU RoHS Compliance

These accessories conform to the 2011/65/EU RoHS Directive.

Disposal



(Applicable in the European Union and other European countries with separate collection systems). This product is subject to Directive 2012/19/EU of the European Parliament and the Council of the European Union on waste electrical and electronic equipment (WEEE), and in jurisdictions adopting that Directive, is marked as being put on the market after August 13, 2005, and should not be disposed of as unsorted municipal waste. Please utilize your local WEEE collection facilities in the disposition of this product.

Introduction

The CT3197B High Voltage Probe BNC Converter is designed as an impedance converter to adapt Cal Test High Voltage Oscilloscope Probes to Digital Multimeters (DMMs) that feature 10M Ω input impedance.



Features

- Two (2) piece design
- High accuracy ($\pm 0.5\%$)
- 50 MHz bandwidth
- Gold plated, beryllium copper contacts

Product Overview

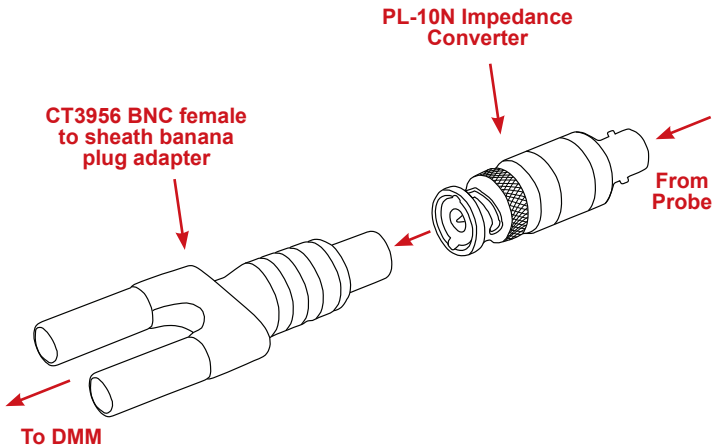


Figure 1 CT3197B: Description

Usage Instructions

- Connect the impedance converter to BNC Adapter
- Connect HV probe to assembled converter
- Plug assembled converter into DMM



Specifications

All specifications apply to the unit after a temperature stabilization time of 20 minutes over an ambient range of $25^{\circ}\text{C} \pm 5^{\circ}\text{C}$.

PL-10N Electrical and Mechanical Characteristics

| | |
|-------------------------------|-------------------------------------|
| Bandwidth | 50 MHz |
| Accuracy | $\pm 0.5\%$ |
| Maximum Input Voltage (DC/AC) | 250 VDC/ 200 Vrms |
| Maximum Working Power | 1 W |
| Input Impedance | 1.111 M Ω |
| Dimensions | 48 mm (L) x \varnothing 16 mm (D) |
| Weight | 25 g |

CT3956 Electrical and Mechanical Characteristics

| | |
|----------------------------|-----------------------|
| Maximum Input Voltage (AC) | 500 Vrms |
| Maximum Current | 3 A |
| Input Impedance | 50 Ω (BNC) |
| Dimensions (L x W x H) | 70 mm x 28 mm x 14 mm |
| Weight | 23 g |

Service & Warranty Information

Limited One-Year Warranty

Cal Test Electronics warrants these products to be free from defective material or workmanship for a period of 1 year from the date of original purchase. Under this warranty, Cal Test Electronics is limited to repairing the defective device when returned to the factory, shipping charges prepaid, within the warranty period.

Units returned to Cal Test Electronics that have been subject to abuse, misuse, damage, or accident, or have been connected, installed, or adjusted contrary to the instructions furnished by Cal Test Electronics, or that have been repaired by unauthorized persons, will not be covered by this warranty.

Cal Test Electronics reserves the right to discontinue models, change specifications, price, or design of this device at any time without notice and without incurring any obligation whatsoever.

The purchaser agrees to assume all liabilities for any damages and/or bodily injury which may result from the use or misuse of this device by the purchaser, his employees, or agents.

This warranty is in lieu of all other representations or warranties expressed or implied and no agent or representative of Cal Test Electronics is authorized to assume any other obligation in connection with the sale and purchase of this device.

Service

If you have a need for calibration or repair services, technical, or sales support, please contact us:

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