



BT-120

Breaker Tracer

Users Manual



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English

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Limitation of Liability

Your Amprobe product will be free from defects in material and workmanship for 1 year from the date of purchase. This warranty does not cover fuses, disposable batteries or damage from accident, neglect, misuse, alteration, contamination, or abnormal conditions of operation or handling. Resellers are not authorized to extend any other warranty on Amprobe's behalf. To obtain service during the warranty period, return the product with proof of purchase to an authorized Amprobe Test Tools Service Center or to an Amprobe dealer or distributor. See Repair Section for details. THIS WARRANTY IS YOUR ONLY REMEDY. ALL OTHER WARRANTIES - WHETHER EXPRESS, IMPLIED OR STATUTORY - INCLUDING IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE OR MERCHANTABILITY, ARE HEREBY DISCLAIMED. MANUFACTURER SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, ARISING FROM ANY CAUSE OR THEORY. Since some states or countries do not allow the exclusion or limitation of an implied warranty or of incidental or consequential damages, this limitation of liability may not apply to you.

Repair

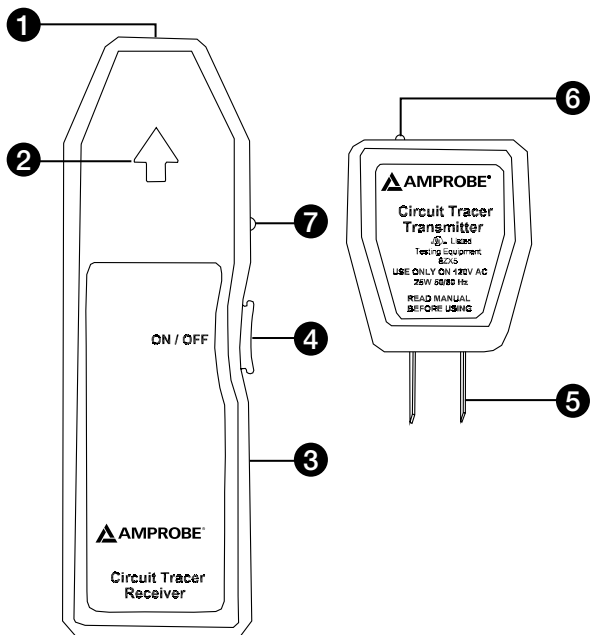
All test tools returned for warranty or non-warranty repair or for calibration should be accompanied by the following: your name, company's name, address, telephone number, and proof of purchase. Additionally, please include a brief description of the problem or the service requested and include the test leads with the meter. Non-warranty repair or replacement charges should be remitted in the form of a check, a money order, credit card with expiration date, or a purchase order made payable to Amprobe® Test Tools.

In-Warranty Repairs and Replacement – All Countries

Please read the warranty statement and check your battery before requesting repair. During the warranty period any defective test tool can be returned to your Amprobe® Test Tools distributor for an exchange for the same or like product. Please check the "Where to Buy" section on www.amprobe.com for a list of distributors near you. Additionally, in the United States and Canada In-Warranty repair and replacement units can also be sent to a Amprobe® Test Tools Service Center (see below for address).

Non-Warranty Repairs and Replacement – US and Canada

Non-warranty repairs in the United States and Canada should be sent to a Amprobe® Test Tools Service Center. Call Amprobe® Test Tools or inquire at your point of purchase for current repair and replacement rates.

















- 1 Sensor Location
- 2 Identification Arrow LED indicator
- 3 Battery Compartment
- 4 ON/OFF Switch
- 5 Adaptor Prongs
- 6 Transmitter power LED indicator
- 7 Receiver power LED indicator

BT-120 Breaker Tracer

CONTENTS

SYMBOLS AND WARNINGS	2
Safety Information	2
Warnings and Precautions.....	3
UNPACKING AND INSPECTION	3
INTRODUCTION	4
OPERATION	4
SPECIFICATION	5
BATTERY REPLACEMENT	7
MAINTENANCE AND REPAIR	7

SYMBOLS

	Battery		Caution ! Refer to the Manual
	Double Insulated		Dangerous Voltage
	Alternating Current		Earth Ground
	Direct Current		Fuse
	Application around and removal from hazardous live conductors is permitted		Complies with European Directives
	Do not dispose of this product as unsorted municipal waste. Contact a qualified recycler for disposal.		Conforms to relevant Australian standards
	Underwriters Laboratories. [Note: Canadian and US.]		Audible tone

Safety Information

- The BT-120 Breakers Tester is conformed to EN61010-1:2001; CAT II 120 V, class II and pollution degree 1 or 2.
- Do not exceed the maximum overload limits (see specifications) nor the limits marked on the instrument itself. Never apply more than 120 V ac rms between the adapter prongs of the transmitter.

⚠ Warning and precaution

- Before and after hazardous voltage measurements, test the voltage function on a known source such as line voltage to determine proper meter functioning. • Do not touch the membrane.
- Inspect the BT-120 receiver and the BT-120 transmitter before every use. Do not use any damaged part.
- Never ground yourself when taking measurements. Do not touch exposed circuit elements or test probe tips.

- Do not operate the instrument in an explosive atmosphere.
- To reduce the risk of fire or electric shock, do not expose this product to rain or moisture.
- The meter is intended only for indoor use. To avoid electrical shock hazard, observe the proper safety precautions when working with voltages above 60 VDC, 42.4 Vpk, or 30 VAC rms. These voltage levels pose a potential shock hazard to the user.

UNPACKING AND INSPECTION

Your Shipping carton should include:

- 1 BT-120 Receiver
- 1 BT-120 Transmitter
- 1 9V Alkaline Battery(Included)
- 1 Users Manual

If any of the items are damaged or missing, return the complete packag to the place of purchase for an exchange.

INTRODUCTION

The Amprobe BT-120 breaker tracer works on powered systems from 90 to 120 VAC and is designed for use in residential and light commercial environments. It comes complete as a kit with transmitter and receiver. The BT-120 is a preferred solution for the latest in code requirements. Identify circuit breakers fast and efficiently.

The features include:

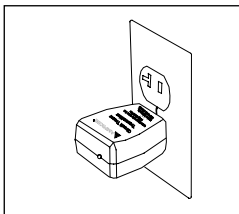
- Identifies circuit breaker location
- Works on all electrical systems from 90 to 120 VAC
- Perfect for office, residential and HVAC applications
- Automatic sensitivity adjustment
- Microprocessor controlled
- Extremely accurate reading always finds the right breaker
- Durable and dependable

OPERATION

Breaker and Fuse Identification

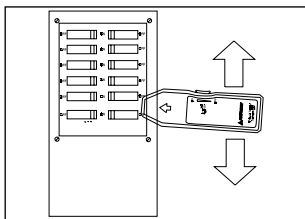
1. Plug the transmitter into an energized 120V wall outlet. Refer to Fig.1.

Fig. 1



2. Make sure the red LED is ON to indicate that the outlet is energized.
3. Push the Power switch on the receiver to turn it ON. The receiver will beep and the Power LED will be lit.
4. At the breaker panel or fuse box, hold the receiver perpendicular to the breakers. Scan slowly all breakers once to calibrate the receiver. During this scan, the receiver may beep and flash at several breakers. This is a normal part of the identification process. Refer to Fig.2

Fig. 2



5. Without touching the ON/OFF button, Start the scan another time to identify the right breaker or fuse. When the receiver beeps, the correct breaker has been identified.
6. Push and Hold the Power Switch for three (3) seconds to turn the receiver off. Beeping and flashing during the shutdown is normal.
7. Unplug the transmitter from the wall outlet.

SPECIFICATIONS

Operating & Detection

Voltage for Transmitter: Model BT-120, 90-120 VAC, Not to exceed $\pm 10\%$ (inclusive in rating)

Operating Frequency: 50 - 60 Hertz

Storage Temperature: 0-40 Degrees C.

Operating Temperature: 0-40 Degrees C.

Sensitivity Adjustment: Automatic

Power Supply: 9-Volt Alkaline Battery. (Receiver Only)

Transmitter Polarity: Automatic

Humidity: 50% RH (non condensing)

Environmental Conditions: For Indoor use, For Altitudes up to 2000 m, Pollution Degree 1 or 2, Installation Category II

Caution: BT-VLA cord assembly to be used with BT-120 Transmitter only according to instructions.

SPÉCIFICATIONS

Operation & Détection

Voltage du transmetteur: BT-120, courant alternatif 90-120 VAC A ne pas excéder ± 10 pour cent (inclus dans l'estimation)

Fréquence d'Opération: 50-60 Hertz

Température de Stockage Température d'Opération: 0-40 degrés C.

Ajustement de Sensibilité: Automatique

Source d'Approvisionnement d'Energie Pile alcaline de: 9 volts (récepteur seulement)

Polarité d'Emetteur: Automatique

Humidité: 50% humidité relative (sans condensation)

Conditions Environnementales: Pour usage à l'intérieur Jusqu'à 2000 m. d'altitude Degré de pollution 1 or 2 Echelon 2 d'Installation

Attention: L'assemblé de ls BT-VLA doit être employée seulement avec l'émetteur du BT-120 selon les instructions.

SPEZISCHE ANWEISUNGEN

Gebrauchs- und Findungs

-spannung für den Sender Ausführung: BT-120 90-120 V Wechselstrom $\pm 10\%$ nicht zu überschreiten (inklusive in Quoten)

Gebrauchsfrequenz: 50-60 Herz

Lagerungstemperatur: 0-40 Grad Celsius

Gebrauchstemperatur: (während Laufzeit) 0-40 Grad Celsius

Empfindlichkeitseinstellung: Automatisch

Strombedarf: 9-Volt Alkali Batterie (Nur für Empfänger)

Polarität des Senders: Automatisch

Luftfeuchtigkeit: 50% relative Luftfeuchtigkeit (unkondensierbar)

Umweltbedingungen: Für Innenbenutzung Für Höhen bis auf 2000 Meter über dem Meeresspiegel Verschmutzungsgrad 1 or 2 Installierungskategorie II

Warnung / Achtung: Das "BT-VLA" Kabel ist nur nach Anleitung zum "BT-120" herzunehmen.

ESPECIFICACIONES

Operación y Detección

Voltaje del Transmisor Modelos: BT-120 90-120 voltios corriente alterna alterna Sin excederse más o menos el 10% (incluyendo el promedio de aumento)

Frecuencia de Operación: 50 - 60 Hertz

Temperatura de Almacenaje: 0-40 Grados Centígrados

Temperatura de Funcionamiento: 0-40 Grados Centígrados

Ajuste Sensitivo: Automático

Fuente de Suministro Bateria Alkalina de: 9 voltios (Receptor solamente)

Polaridad del Transmisor: Automática

Humedad: 50% Humedad Relativa (sin condensación)

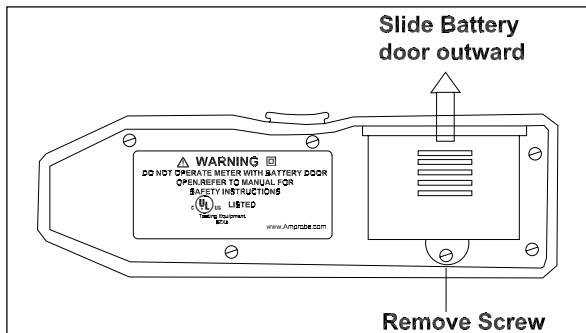
Condiciones Ambientales: Para uso interno Para altitudes hasta de 2000 metros Grado 1 or 2 de polución Categoría II de Instalación

Precaución: Ensamblaje de cuerdas BT-VLA Para ser usado con el BT-120 solamente De acuerdo con las instrucciones

BATTERY REPLACEMENT

Power is supplied by 9V Alkaline Battery x1

The Identification Arrow LED on the receiver will not turn ON when replacement is needed. To replace the battery, remove the screw from the back of the meter and slide the battery door outward. Remove the battery from case bottom and replace it with a fresh 9V Alkaline battery.



MAINTENANCE AND REPAIR

If there appears to be a malfunction during the operation of the meter, the following steps should be performed in order to isolate the cause of the problem.

1. Check the battery. Replace the battery immediately when the receiver LED doesn't turn ON.
2. Review the operating instructions for possible mistakes in operating procedure.

Except for the replacement of the battery, repair of the meter should be performed only by a Factory Authorized Service Center or by other qualified instrument service personnel. The front panel and case can be cleaned with a mild solution of detergent and water. Apply sparingly with a soft cloth and allow to dry completely before using. Do not use aromatic hydrocarbons or chlorinated solvents for cleaning.