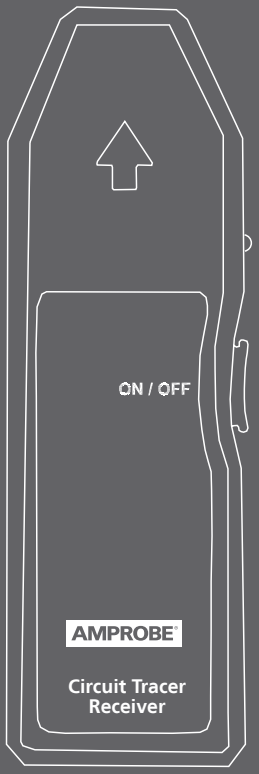
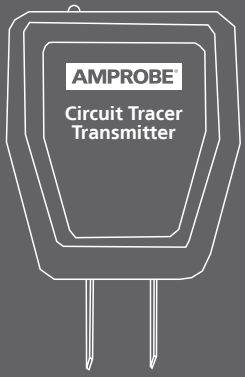
AMPROBE®





BT-120, BT-250
Breaker Tracer

User Manual

ENG

AMPROBE®

BT-120
BT-250
Breaker Tracer

English

User Manual

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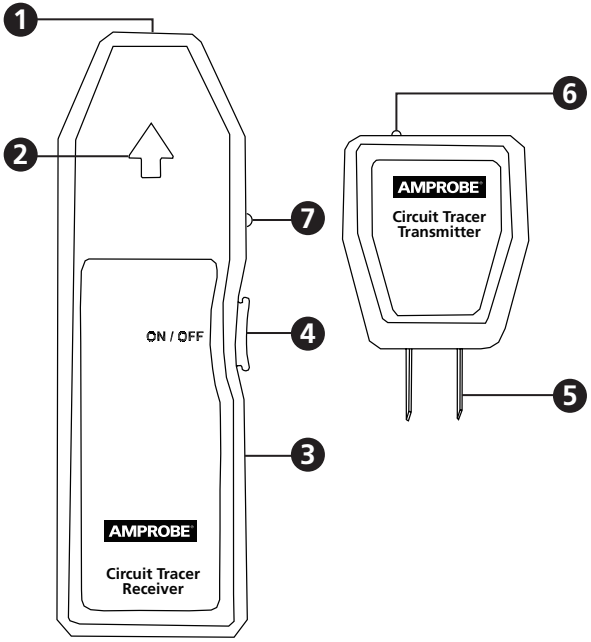


1. Sensor Location
2. Identification Arrow LED Indicator
3. Battery Compartment
4. ON/OFF Switch
5. Adaptor Prongs
6. Transmitter Power LED Indicator
7. Receiver Power LED Indicator

CONTENTS

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	CE	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 UL 61010-1; CAT II 120 V, class II and pollution degree 1 or 2.
- The BT-250 Breakers Tester is conformed to UL 61010-1; CAT II 250 V, class II and pollution degree 1 or 2.

⚠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 membrance.
- Inspect the receiver and the 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 Receiver
1 Transmitter
1 9V alkaline battery
1 User manual
1 Carrying case (BT-250)
1 Connection cable (BT-250)
1 Light fixture adapter (BT-250)

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

INTRODUCTION

The Amprobe BT Series Breaker Tracers work on powered systems from 90 to 120 V AC (BT-120) and 90 to 250 V AC (BT-250) and are designed for use in residential and light commercial environments. Both kits comes complete with a Transmitter and Receiver.

Features:

- Identifies circuit breaker location
- Works on all electrical systems within the voltage rating range
- 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 wall outlet (Figure 1).

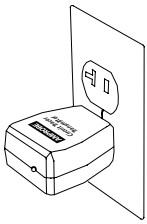


Figure 1

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 (Figure 2).

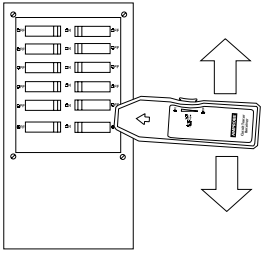


Figure 2

5. Without touching the ON/OFF button, begin scanning again 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 seconds to turn the Receiver off. Beeping and flashing during the shutdown is normal.
7. Unplug the Transmitter from the wall outlet.

Using the BT-LFA Incandescent Light Fixture Adapter (BT-250 only)

1. Remove the light bulb exercising the proper caution.
2. Screw in the BT-LFA adapter.
3. Plug the Transmitter into the BT-LFA (Figure 3).

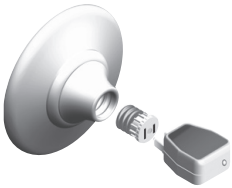


Figure 3

4. Preform scan following directions in step 4 under "Operation."

Using the BT-VLA High Voltage Leads Adapter (BT-250 only)

The BT-250 Transmitter can be used alone on 110V circuits. For circuits up to 250V or exposed circuits, use the BT-VLA and follow the directions listed below.

1. Plug Transmitter into high voltage lead receptacle. Be sure that the Transmitter is completely seated and that no part of the Transmitter prongs are exposed.
2. Attach the high voltage leads to the terminal or conductor while exercising extreme caution (Figure 4).
3. Preform scan following directions in step 4 under "Operation."

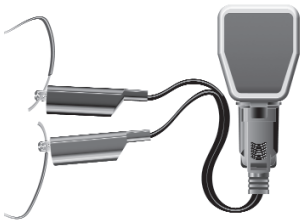


Figure 4

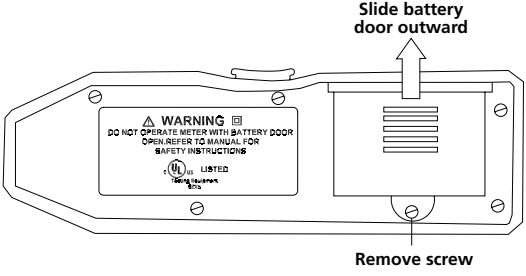
SPECIFICATIONS

Operating & Detection	BT-120	BT-250
Voltage for Transmitter	90-120 VAC, Not to exceed ±10% (inclusive in rating)	90-250 VAC, Not to exceed ±10% (inclusive in rating)
Operating Frequency	50 Hz to 60 Hz	40 Hz to 70 Hz
Storage Temperature	32 °F to 104 °F (0 °C to 40 °C)	
Operating Temperature	32 °F to 104 °F (0 °C to 40 °C)	
Sensitivity Adjustment	Automatic	
Power Supply	9 V alkaline battery (Receiver)	
Transmitter Polarity	Automatic	
Humidity	50% RH (non condensing)	
Environmental Conditions	Indoor use, altitudes up to 2000 m, Pollution Degree 1 or 2, Installation Category II	
Caution	BT-VLA cord assembly to be used with Transmitter only according to instructions.	

BATTERY REPLACEMENT

Power is supplied by one 9 V alkaline battery (Receiver).

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 9 V alkaline battery.



MAINTENANCE AND REPAIR

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

1. Check the battery. Replace the battery immediately if 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 tracer 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.