

INSTRUCTION MANUAL

200EP INDUCTIVE AMPLIFIER WITH ADJUSTABLE VOLUME



WARNING

Read and understand this material before operating or servicing this equipment. Failure to understand how to safely operate this tool can result in an accident causing serious injury or death.

95E0056

Rev. B



SAFETY ALERT SYMBOL

This symbol is used to call your attention to hazards or unsafe practices which could result in an injury or property damage. The signal word, defined below, indicates the severity of the hazard. The message after the signal word provides information for preventing or avoiding the hazard.



DANGER

Immediate hazards which, if not avoided, WILL result in severe injury or death.



WARNING

Hazards which, if not avoided, COULD result in severe injury or death.



CAUTION

Hazards which, if not avoided, MAY result in injury.



WARNING ELECTRIC SHOCK HAZARD

- Do not expose this unit to rain or moisture. Contact with live circuits can result in severe injury or death.
- Use this unit for the manufacturer's intended purpose only, as described in this manual. Any other use can impair the protection provided by the unit.
- Use test leads or accessories that are appropriate for the application. See the category and voltage rating of the test lead or accessory.
- Inspect the test leads or accessory before use. The item(s) must be clean and dry, and the insulation must be in good condition.
- Before opening the case, remove the test leads from the circuit and shut off the unit.

Failure to observe these precautions may result in severe injury or death.



CAUTION

- Do not attempt to repair this unit. It contains no user-serviceable parts.
 - Do not expose the unit to extreme temperatures or high humidity. See Specifications.
- Failure to observe these precautions can result in injury and can damage the instrument.

Introduction

This manual is intended to familiarize personnel with the safe operation and maintenance procedures for the Tempo 200EP Inductive Amplifier.

Please read this entire manual before operating the tool and keep this manual available to all personnel. Replacement manuals are available upon request at no extra charge.

Safety

Safety is essential in the use and maintenance of Tempo tools and equipment. This instruction manual and any markings on the tool provide information for avoiding hazards and unsafe practices related to the use of this tool. Observe all of the safety information provided.

Description

The 200EP Inductive Amplifier, when used in conjunction with any Tempo tone generator, is designed to identify and trace wires or cables within a group without damaging the insulation.

Features include:

- Spring-loaded ON/OFF button.
- Adjustable volume sensitivity control.
- Recessed terminal ports for handset connection.
- Resistive plastic carbon-fiber tip prevents accidental shorts when probing wires.

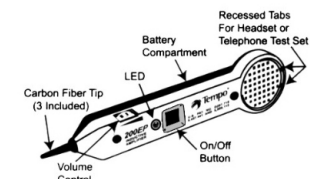


Fig. - 1

Operation

1. Connect the test set leads of a Tempo Tone Test Set to the subject pair. In the case of a single conductor, connect the RED lead to the subject wire and the BLACK lead to earth or an independent equipment ground. See the instruction manual provided with the tone generator for details. See Figure 2.

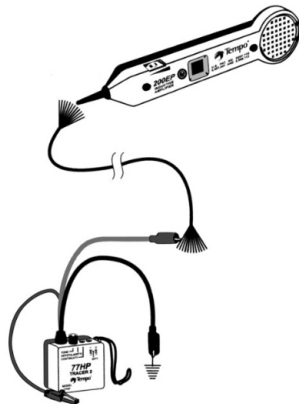


Fig. - 2

2. Place the Test Set in the "TONE" position.
3. To activate the 200EP, press and hold the square spring-loaded ON/OFF button. This button must remain depressed to operate. Hold the tip of the probe near the tone generator and listen for the tone. This verifies that the tone generator is working, and identifies the sound of the tone (steady, warbling, etc.).

4. Once activated, the volume control can be adjusted to suit the environment. Reception can be increased to overcome noise (e.g. vehicular traffic, airplanes or engine room), or decreased to reduce interference (e.g. computer/date hum or AC buzz).
5. The 200EP is equipped with recessed terminal ports for connecting a lineman's handset. Attaching the handset automatically activates the amplifier. The handset must be in the TALK position to receive the tone.
6. Touch the tip of the 200EP to the insulation of each suspect conductor. Reception of tone will be loudest on the subject wire and detection may be improved by separating the wires from the group. If more than one pair or single conductor is carrying the tone, decrease the volume until only the subject conductor is left with tone, insuring that positive identification has been made.

Note: To use the 200EP without pressing the ON/OFF button, connect a jumper, a telephone test set (in Talk mode), or headset to the recessed tabs near the speaker.

Specifications

Electrical

| | |
|-----------------------------|---|
| Gain |Nominal 30 dB |
| Input Impedance |Nominal 100 M Ohm |
| Probe Tip Resistance (min): | |
| Metal Tip |0 Ohm |
| Plastic Tip |300 Ohm |
| Battery |One 9 Vdc (NEDA 1604, JIS 006P, or IEC 6LR61) |
| Battery Life (nominal) |50 hours |

Physical

| | |
|--------|---------------------|
| Length | 231 mm (9.0") |
| Width | 55 mm (2.2") |
| Depth | 28 mm (1.1") |
| Weight | 145g (5.2 oz) |

Operating/Storage Conditions

| | |
|--------------|----------------------|
| Temperature: | |
| Celsius |0° C to 50° C |
| Fahrenheit |32° F to 122° F |

Maintenance

Battery Replacement



WARNING

Before opening the case, remove the test leads from the circuit and shut off the unit. Failure to observe these warnings can result in severe injury or death.

1. Turn the unit off.
2. Remove the screw, then the battery cover.
3. Replace the battery (observe polarity).
4. Replace the battery cover and the screw. DO NOT OVERTIGHTEN SCREW.

Tip Replacement

1. Turn the unit off.
2. Remove the two slotted screws and CAREFULLY separate the two halves of the housing. Do not strain the exposed wire leads.
3. Replace the tip.
4. Re-assemble housing. DO NOT OVERTIGHTEN SCREWS.

Cleaning

Periodically wipe with a damp cloth and mild detergent; do not use abrasives or solvents.