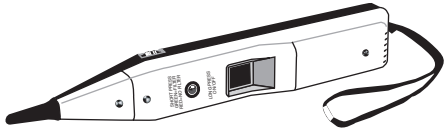


INSTRUCTION MANUAL



200FP Filtered Tone Probe

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.



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.



Do not discard this product or throw away!
For recycling information, go to www.Tempo.com.

All specifications are nominal and may change as design improvements occur. Tempo Textron Inc. shall not be liable for damages resulting from misapplication or misuse of its products.

KEEP THIS MANUAL

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 warnings can result in severe injury or death.



CAUTION

Electric shock hazard:

- 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.

Description

The 200FP Filtered Tone Probe is designed to identify and trace wires or cables within a group without need of removing insulation. In addition, the 200FP has been specifically designed to filter out all power-related noise to eliminate "Power Line Hum." The unit is constructed of durable ABS plastic, and an optional leather carrying case, 200C, is available. The 200FP is also available as part of the Model 801K kit.

When the 200FP is ON but not detecting a signal, the signal LED will flash momentarily (every 4 seconds) as a visible ON indicator and reminder. When a tone signal is detected by the probe, the signal LED will serve as a signal strength indicator. The brighter the LED, the stronger the tone signal detected.

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.

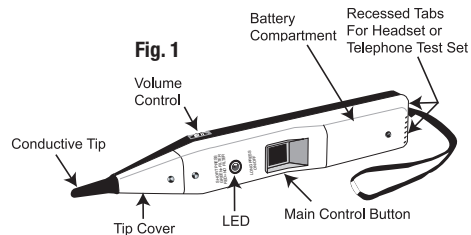
Purpose of this Manual

This manual is intended to familiarize personnel with the safe operation and maintenance procedures for the Tempo Communications 200FP Filtered Tone Probe. 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.

Controls (See Figure 1)

A long press of the main control button turns the unit OFF or ON, and the unit beeps to indicate the change. A lower pitch beep indicates that the unit is going OFF. An Auto-Off feature has been incorporated to turn the 200FP OFF after 5 minutes to help preserve battery life. When Auto-Off activates, a bee-bee-bee sounds from the speaker to alert the user that the 200FP is now OFF. When the battery voltage is low, the unit sounds three descending tones when it is turned ON.

Short presses of the main control button engage and disengage the hum filter of the 200FP. The unit beeps to indicate the change – a single beep means it is entering the normal unfiltered mode,



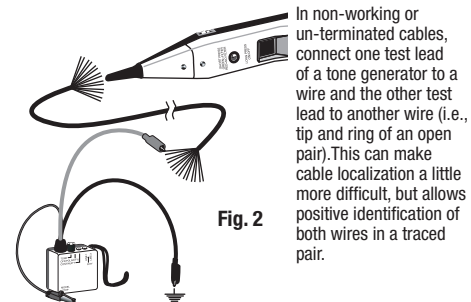
while a double beep means the filter is engaged. In the normal mode the LED indicator operates in red color, and in filter mode the LED appears green.

A volume control knob located on the right side of the 200FP allows the user to control the sensitivity and loudness of the probe output.

Operation

Identification of wires and cables is accomplished by first connecting a tracing tone generator like the Tempo Communications 77HP, 77GX or AT8 to the wires being traced.

In working cables that are terminated, connect one lead of the tone generator to a wire and the other test lead to earth or equipment ground. This allows localization of the cable and identification of the connected wire. (See Figure 2)



In non-working or un-terminated cables, connect one test lead of a tone generator to a wire and the other test lead to another wire (i.e., tip and ring of an open pair). This can make cable localization a little more difficult, but allows positive identification of both wires in a traced pair.

1. To activate the 200FP, use a long press of the square main control button.

Note: Changes in temperature and battery power can affect the frequency of tones produced by any given tone generator. Under certain conditions, a tone test set may produce frequencies that are similar to power line hum and cause them to be blocked by the 200FP's filter mode.

2. Prior to locating the tone at the far end of the cable or wire, confirm proper operation of the 200FP at the tone source. With the probe ON and in the filter mode (a short press of the control button and a green LED blink), listen for a solid single tone or a complete warble tone at the tone generator. If no tone or only "half" of a warble tone is detected, use the 200FP in the "Normal" unfiltered setting or replace the battery in the tone generator.
3. Once activated, the volume control can be adjusted to suit the environment. Loudness of the probe tone output can be increased to overcome noise (i.e., vehicular traffic, airplanes or machinery) or decreased to reduce interference or when working in noise sensitive areas.
4. The 200FP is equipped with recessed ports for connecting a lineman's butt set. Attaching the butt set automatically activates the probe when Talk mode is selected on the set.
5. To activate the 200FP without depressing the main control button, silence the speaker, and use only the LED, attach a jumper between the two recessed tabs. This simulates connection of a butt set.
6. Touch the tip of the 200FP to the insulation of each potential target conductor.
7. Reception of tone will be loudest on the subject wire. (Reception of the tone may be improved by separating the wires from the group.)

Specifications

Electrical
 Nominal Gain: 35 dB
 Nominal Input Impedance: 100 M Ω
 Probe Tip Resistance (minimum): 300 Ω
 Battery: One 9V alkaline
 Nominal Battery Life: 50 hours
 Overvoltage Protection: Cat I, 150V to Gnd

Physical

Length: 250 mm (9.85")
 Width: 32 mm (1.27")
 Depth: 35 mm (1.38")
 Weight: 142 g (5 oz)

Operating/Storage Conditions

Temperature: 0 °C to 50 °C (32 °F to 122 °F)

Maintenance

⚠ WARNING

Before opening the case, remove the test leads from the circuit and shut off the unit.

Failure to observe this warning can result in severe injury or death.

Battery Replacement

1. Turn the unit off.
2. Remove the screw, then the battery door.
3. Replace the battery (observe polarity).
4. Replace the back and the screws. **Do not overtighten the screw.**

Tip Replacement

1. Turn the unit off.
2. Remove the slotted screw and remove tip cover.
3. Replace the tip.
4. Replace tip cover and screw. **Do not overtighten the screw.**

Cleaning

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

One-Year Limited Warranty

Tempo Communications Inc. warrants to the original purchaser of these goods for use that these products will be free from defects in workmanship and material for one year, excepting normal wear and abuse.

For all Test Instrument repairs, you must first request a Return Authorization Number by contacting our Customer Service department at:

toll free in the US and Canada 800 642-2155.

Telephone +1 760 510-0558.

Facsimile +1 760 598-5634.

This number must be clearly marked on the shipping label. Ship units Freight Prepaid to: Tempo Repair Center, 1390 Aspen Way, Vista, CA 92081 USA.

Mark all packages: Attention: TEST INSTRUMENT REPAIR.

For items not covered under warranty (such as dropped, abused, etc.) repair cost quote available upon request.

Note: Prior to returning any test instrument, please check to make sure batteries are fully charged.

Tempo Communications

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www.TempoCom.com