

## **Lil' Buttie Test Set** Operating Instructions

### **Caution**

Please follow correct safety practices when operating this unit. Do not connect this unit to 110 volt or 220 volt AC electric power lines. Correct operation is entirely the responsibility of the user. Should the Lil' Buttie, intentionally or by accident, be connected to electric power, all warranties are immediately null and void.

### **CONNECTION**

All connections to the Lil' Buttie should be initialized utilizing the recommended cordset for the testing of telephone circuits and services. These cordsets may be inserted into the modular jack located at the base of the unit. See the CORDSETS section of these instructions for further details.

### **GENERAL DESCRIPTION**

The Test-Um Lil' Buttie is a self-contained, self-powered, portable telephone test set for use by installers, repair technicians, and other authorized personnel for temporary communications and the operational service and installation of telephone/data lines.

### **Lil' Buttie Test Set Features**

- Tone and Pulse Dialing
- Microphone Mute Feature
- Last Number Redial — 32 Digits
- Continuous Line Polarity Indication (TALK or MONITOR)
- Electronic Ringer
- Amplified Line Monitor for volume levels comparable to "off hook" operation.
- Modular cordset attachment
- Low Battery Indicator
- Headset Jack for hands-free conversations
- Battery-Powered Monitor Mode with auto power off on dead lines or when disconnected

A compact size and comfortable ergonomic shape makes it small enough to carry in your pocket or to wear on your belt, while still retaining the normal earpiece-to-microphone dimensional spacing for comfortable use while resting on the shoulder.

Included headset jack and ear-mounted headset allows for hands-free operation. Headset is compact enough to fit in shirt pocket and can be worn on either ear. It's unobtrusive design makes it easy to use while wearing a hard hat or other inclement weather clothing.

The body is made of high-impact resistant 94 V0 ABS to withstand the rough handling and shocks that crafts tools are normally subjected to in their everyday use.

A belt loop provides a convenient and secure location for the attachment of the unit to various locations.

Modular jack cordset with strain relief feature allows for easy field replacement or direct connection to modular walljack with a standard phone cord set.

### **INDICATORS, BUTTONS, AND SWITCHES**

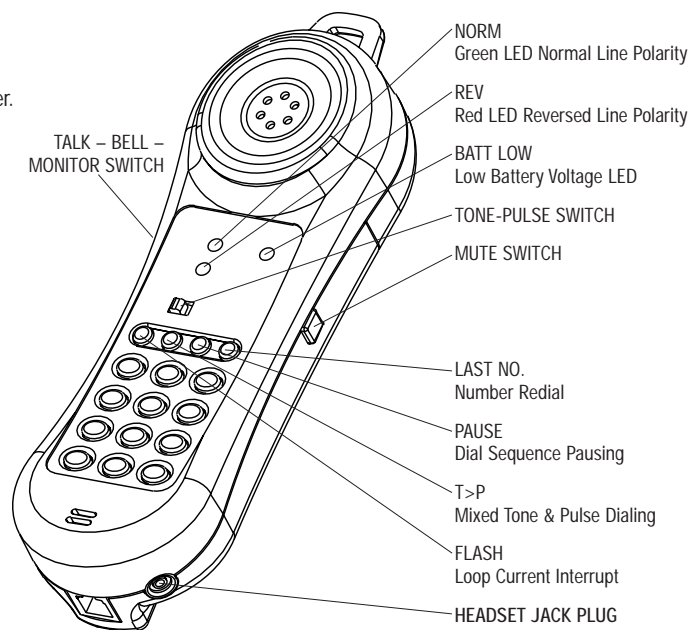
**Talk-Bell-Monitor Switch** This three-position slide switch is located on the side of the unit below the receiver. It is used to select the mode of operation.

**Talk** This position creates an off-hook condition. In this mode, the unit can be used for signaling, conversation and testing, just like an ordinary telephone.

**Bell** This position connects the internal electronic ringer for the receiving of incoming ring signals. This on-hook mode also isolates both the testing and speech circuits from the line.

**Monitor** This position connects the test set through a high impedance coupling. This on-hook connection allows for telephone line monitoring without disturbing conversations, network signaling, or data transmissions. In this mode, the unit's speech, ring and test circuits are isolated from the line.

**Tone-Pulse Switch** This two-position slide switch is located on the inside of the hand grip below the receiver. It is used to select the dialing mode. The TONE position selects DTMF signaling. The PULSE position selects rotary style pulse dialing.



**Mute Switch** Located below the receiver on the opposite side of the unit from the Talk-Bell-Monitor Switch, when it is pressed, the unit's transmitter is shut off for as long as it is depressed. This feature may also be used to improve communications in noisy locations where ambient noise may create a local effect that makes it difficult for the user to hear a person on the other end of the line.

### **Function Buttons**

**Flash (Fish)** When pressed, causes a 0.6 second interruption of the loop current (hook flash). Usually used for register recall, to put a call on hold, to activate a second line, or where some special function needs to be activated.

**T>P (Tone)** Utilized in mixed mode dialing, switches from PULSE to TONE dialing mode. See the OPERATION section for details.

**Pause (Pau)** When pressed, a pause of approximately 3 seconds is inserted in the dialing sequence for PBX or CENTRAX switch dialing or other systems that require an intermediate access digit in order to access a line.

**Last No. (Rcl)** When pressed, the last number dialed will be redialed from the unit's internal memory. See the OPERATION section for details.

### **LEDs**

**Line Polarity Indicators** See OPERATION section for details.

**NORM** A green LED will light up if the polarity is correct.

**REV** A red LED will light up indicating a reversed line polarity.

**BATT LOW** When operated in the Monitor mode, the LED will light up if low battery voltage is detected.

### **OPERATION**

**NOTE:** Always position the Talk-Bell-Monitor Switch in the Monitor position before connecting to a subscriber line to avoid possibly compromising any transmission in progress.

The Lil' Buttie can be operated in either the Bell or Talk modes, without the internal battery or with a low-battery energy level. In addition, the last number redial feature can still be utilized, however, the nominal retention time will be 8 minutes.

### **Connecting to a Line**

- Monitor**
1. Select the Monitor mode.
  2. Connect the RED cordset lead to Ring (-) and BLACK cordset lead to Tip (+).
  3. NORM or REV polarity LED will come on if the line is powered. Listen on the line for voices, ambient noise, or buzzing sounds, indicating digital data.

Note: If detected, the Low Batt LED will indicate a low operating voltage in this mode.

See MAINTENANCE section for battery replacement.

- Dialing**
1. Select the Monitor mode.
  2. Connect the RED cordset lead to Ring (-) and BLACK cordset lead to Tip (+).
  3. Confirm that the line is not in use.
  4. Position the Tone-Pulse Switch to select either tone or pulse dialing.

5. Select the Talk mode and confirm that dial tone is received.
6. Proceed with dialing, line testing, etc.

**Mixed-Mode Dialing** In certain situations, it may be necessary to set up a call using both Pulse and Tone dialing. In this situation, a number can be entered in the Pulse mode then by pressing the T>P button, the unit will switch to Tone mode so that tones can be sent to devices such as answering machines, etc. that are activated by specific tone codes.

**Last Number Redial** The last number dialed can automatically be redialed in either the Tone or Pulse modes. To redial the last number, switch from Talk to Monitor then back to Talk mode. Once you have confirmed a dial tone press the LAST NO. button on the keypad.

- Ringer**
1. Select the Ring mode.
  2. Connect the RED cordset lead to Ring (-) and BLACK cordset lead to Tip (+).
  3. The unit will now "ring" when ringing voltage is detected on the line.
  4. To answer the call, switch the unit to TALK mode.
  5. To disable the ringer, switch the unit to MONITOR mode.

- Polarity Check** The Lil' Buttie indicates Polarity continuously in Monitor and Talk modes as long as the line is powered.
1. To test, select the MONITOR or TALK mode.
  2. Connect the BLACK cordset lead to Ring (+) and RED cordset lead to Tip (-).
  3. The red LED will light up if the leads are reversed and the green LED will light up if the polarity is correct.

**Line Cord Connection** The Lil' Buttie is designed with a standard 6-position modular jack for the quick connection to various cordsets. The jack is located at the base of the unit below the mic. To replace the cordset, simply remove the strain relief attachment screw and unplug the cordset. Insert the new cordset and replace the strain relief terminal and screw.

**Headset** The included headset can be utilized when a hands-free/off-the-shoulder operation is preferred. Plug the headphone jack into the receptacle located at the base of the unit next to the modular plug receptacle. Headset can be used for either ear by rotating the microphone position by 45 degrees.

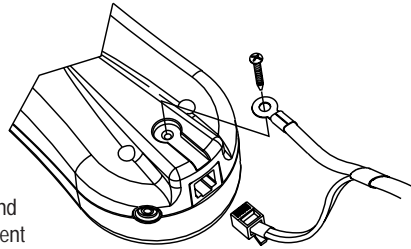
NOTE: When plugged in, the internal handset is disconnected.

## Cordsets

### Standard Cordset

Part Number LB20

Approximately 5 feet in length with modular plug and strain relief grommet on one end and self-piercing bent nose clips on the other end.



### Bed of Nails Cordset

Part Number LB30

Same description as above, except for the addition of a bed of nails option in the clip.

### Alligator Cordset

Part Number LB10

Same description as the standard cordset, except for the substitution of alligator style clips.

## SPECIFICATIONS

### Electrical

Return Loss — @ 600 ohms:  
Greater Than 14dB

Line Current Range:  
15 to 120 mA

Apparent Line Resistance:  
275 ohms at 20mA

### Rotary Dial Output

Pulse Rate: 10 pps +/- 10%  
M/B Ratio: 60/40% +/- 2 %  
Interdigit Interval: 820 mSec  
Leakage During Break:  
>120 Kohms

### DTMF Output (into 600 ohms )

Tone Frequency Error: +/- 1.5%  
Tone Level —  
High Group: -6dBm +/- 2dB  
Low Group: -8dBm +/- 2dB  
High vs Low Tone Difference:  
2dB +/- 1dB

*Specifications subject to change*

### Memory Dialing

Type: Last Number Redial  
Mode: Tone and Pulse  
Retention: w/bat > 2yrs,  
w/o bat 8 min. nom  
Capacity: 32 Digits

### Ringer

Electronic Dual Tone

### Physical

Length w/o Lanyard:  
7.25 in (18.4 cm)  
Width: 2.50 in (6.4 cm )  
Height: 1.68 in (4.3 cm )  
Weight with Cord Set:  
8 ozs. (227 gms)

### Environmental

Temperature —  
operating: -10°C to 60°C  
storage: -40°C to 66°C

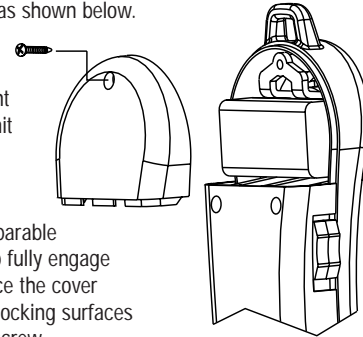
## MAINTENANCE

The test set may be cleaned with a damp cloth. If heavy accumulations of dirt are present, a small amount of liquid soap may be applied to the cloth to assist in cleaning. Do not use solvents, scouring powders, or other abrasive cleaners as they may scratch the unit and/or cause malfunctions.

Cordsets should be periodically checked for shorts, continuity, or obvious signs of wear, such as fraying or loose/damaged test clips.

Should the Batt Low LED indicate low battery voltage, the battery should be replaced as shown below.

To replace the battery, access the battery compartment at the rear of the unit by unscrewing the cover. Unplug the existing battery and replace with a comparable unit, making sure to fully engage the contacts. Replace the cover by seating the interlocking surfaces and tightening the screw.



WARNING: Do not over tighten the screw — damage to the unit may result. If problems are noted while attempting to close the cover, confirm that the battery is properly seated and the cover is fully interlocked with the body.

## WARRANTY

Test-Um Inc. guarantees to the end-user purchaser that its products, and each of the parts thereof, will be free of all defects in material and/or workmanship. This warranty extends for a period of 12 months for the portable telephone test set and 12 months for the cordset from the date of manufacture or proof-of-purchase.

The obligations of Test-Um Inc. under this warranty is limited to the repair or replacement (at our option) during the warranty period, of any part that proves to be defective in material or workmanship under normal use, installation and service, provided the product is returned to Test Um Inc. freight prepaid.

Products returned to us must be accompanied by a copy of the purchase receipt. In the absence of such a receipt, the warranty period will cease 12 months from the date of manufacture.

This warranty does not extend to products which have been subjected to neglect, accidental or improper use, or to units which have been altered, repaired, or inspected by other than Test Um authorized personnel. In no event will Test-Um Inc. be liable for any incidental or consequential damages .

## Service

The Lil' Buttie is designed and manufactured to provide trouble free service. However, if for some reason your test set should require repair, please follow these instructions.

## Shipping

1. Before returning any product to Test-Um Inc., you must first request a Return Goods Authorization Number by contacting our Customer Services Dept. at 805-383-1500. No shipments will be accepted without this number, which must be clearly marked on the shipping label.
2. Ship the test set with a copy of the sales receipt, if available.
3. Attach a description of the operational problem.
4. Include a contact name, phone number, and e-mail address (if possible).
5. Pack securely to prevent damage during shipping.
6. Ship prepaid to: Test-Um Inc, 1330 Flynn Road, Unit E  
Camarillo, CA 93012

## WARRANTY SERVICE

All units returned for warranty repair will be repaired or replaced free of charge, at the discretion of Test-Um Inc., and will be shipped freight prepaid. In the event that a sales receipt or other dated proof-of-purchase documentation is not available, a period of not more than 12 months from date of manufacture shall apply.

## NON-WARRANTY SERVICE

Damaged units returned for non-warranty repairs will be inspected and an estimated repair cost forwarded by phone or mail. Once an approval of these costs is received, the unit will be repaired. Charges for service and return freight will be invoiced on a C.O.D. basis with the unit.