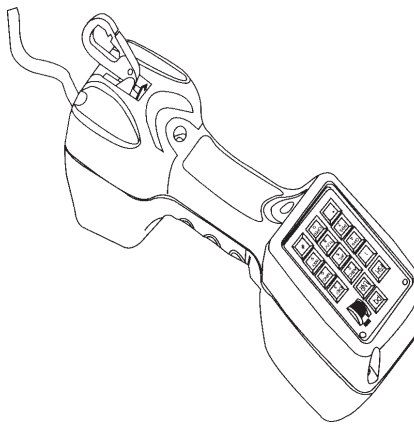
TELEMASTER®

Linesman's Test Phone



User's Manual

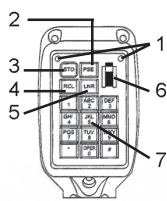
Cat # T0111

Thank you for purchasing the Telemaster® Linesman's Test Phone. Before using it for the first time, please read these instructions to familiarise yourself with the features and operation of your new test-phone.

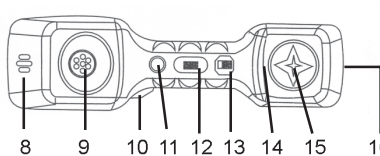
Features:

- Speakerphone for convenient hands-free two-way conversations
- Three-level volume adjustment for speakerphone volume
- Battery saving feature turns off speakers after 5 minutes of inactivity
- Mute Switch
- High impedance monitoring
- Line-polarity LED indicators
- Electronic ringer
- Tone or pulse operation
- Stores up to 12 speed-dial numbers
- Last number redial feature
- PBX pause button

Location of controls



1. Line polarity LEDs
2. Pause key
3. Store key
4. Recall key
5. Last number redial key
6. Tone/Pulse switch
7. Numeric dialpad



8. Amplified speaker
9. Receiver
10. Talk/Monitor switch
11. Handset/Speakerphone switch
12. Speakerphone level control switch
13. Mute switch
14. Tone ringer
15. Transmitter
16. Speakerphone microphone

Handset & Speakerphone Controls

Talk/Monitor switch (10)

The “talk” position (sliding the switch towards the handset’s receiver) gives an off-hook condition for dialing and speaking using the test phone as a standard handset.
The Monitor position (sliding the switch towards the handset’s transmitter) provides a high impedance coupling across the circuit to allow monitoring without disturbing conversations or signalling.

Handset/Speakerphone switch (11)

This press-button turns the speakerphone on or off. While in Speakerphone mode, the normal handset transmitter and receiver are muted to provent acoustic feedback.

Volume Control (12)

This three-position slide switch controls the volume of the amplified speaker in Speakerphone mode. The volume can be set to H (High), M (Medium) or L (Low).

Mute Switch (13)

This turns the hands-free Speakerphone microphone on or off to provide privacy.

Speakerphone Calling

When making a call in Speakerphone mode, the dialled digits are heard via the loudspeaker, providing audible feedback to the user.

Battery Saving Feature

To extend the battery life, the speaker will automatically shut off after approximately five minutes if there has not been a signal greater than -30 dBm during that period. If there is any signal greater than -30 dBm, the timer is reset and the speaker is kept turned on. A battery must be installed to allow Speakerphone operation.

Keypad Controls

Tone/Pulse switch (6)

This slide-switch selects either tone or pulse dialling. Slide the switch to select the required dialling mode. The switch may be operated between digits during dialling to chang the dialling mode for the next digit(s) dialled.

Last Number Redial key (5)

The LNR key redials the last number dialled. It applies to either tone or pulse operating modes.

Recall key (4)

The RCL key is used to recall a stored number. After receiving dial-tone, press the RCL key followed by the dialpad key (7) used to store the number. The number will be automatically dialled.

Pause Key (2)

This key inserts a 3.6 second pause when pressed during dialling. To insert a pause in a stored number, press the PSE key at the point where the pause is required.

Storing Numbers

The STO key (3) is used to store numbers in the 12 memory locations (dialpad keys 0 through 9 plus * and #). Up to 16 digits can be stored in each location.Before storing a new number, it is advisable to first clear the memory location to be used by pressing the STO key twice, followed by the memory location key.

To store a number while off-line:

1 Slide the Talk/Monitor switch (10) to the “Talk” position.
2 Press the STO key (3).
3 Dial the number to be stored using the dialpad keys (7).
4 Press the STO key (3).
5 Press the dialpad key (7) where the number is to be stored.
6 Slide the Talk/Monitor switch (10) to the “monitor” position.

To store a number while on-line and off-hook:

1 Connect the test phone to a line and dial the number.
2 Press the STO key (3) twice.
3 Press the dialpad key (7) where the number is to be stored.

Operation

Monitoring a circuit

To monitor a line, set the Talk/Monitor switch (10) to “Monitor” (slide it down towards the handset transmitter). Connect the test leads to the circuit under test. Monitoring can now occur without dusturbing traffic on the circuit.

Connecting to a circuit

To connect to a line, connect the test leads to the circuit under test and set the Talk/Monitor switch (10) to “Talk” (slide it up towards the handset receiver). The test phone will be physically connected across the circuit under test disturbing any traffic in progress.

> **Warning**
> When testing circuits, clicks in the receiver can sometimes be loud enough to cause acoustic shock. Do not hold the test phone tightly against your ear.

LED Polarity indicators (1)

The line-polarity LEDS illuminate to show the polarity of the line when off-hook in handset mode. They do not operate in Speaker-phone mode. The green LED will light if the red test lead is connected to the Tip (positive) side of the line and the black test lead is connected to the Ring (negative) side of the line. The red LED will light if the test leads are reversed. The LEDS will flash during either tone or pulse dialling. A battery must be inserted for the LED indicators to work.

Maintenance

Disconnect the test phone from any circuits before attempting maintenance.

If the test set fails to perform correctly, the most likely cause is a flat battery. Fit a new battery as described on the next page and re-test the phone.

Chlorinated cleaners must not be used to clean the test phone.

Battery Installation/Replacement

1 Completely remove the three screws (17) holding the lower case-lid (18) to the handset body. Note that the single "top-most" screw is longer than the two "bottom" screws. It's important to replace the screws in their correct positions.

2 Remove the lower case-lid (18).

3 Lift out the battery holder (21).

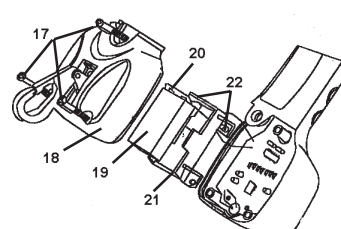
4 Install/replace the alkaline or Lithium 9V battery, making sure that the battery leads and associated battery connector (20) pass through the large rectangular "hole" in the battery holder (21).

5 Check that the battery-connector (20) has been correctly fitted to the battery terminals.

6 Put the battery into it's holder (21).

7 Place the battery holder into the lower case-lid placing the two "studs" (22) on the holder into the two holes towards the top of the case-lid (18).

8 Replace the lower case-lid onto the handset body, ensuring that the battery wires will not be crimped/damaged during assembly and that the test-



17. Screws
18. Case lid
19. Battery
20. Battery connector
21. Battery holder
22. Studs

Specifications

ELECTRICAL		
Loop limit	2K Ù max @ 48V DC (nominal 20mA loop current)	
DC resistance (Talk mode)	Typically 300 Ù	
Impedance (Monitor mode)	39K Ù nominal @ 1KHz	
Pulse output	Pulse rate: 10pps + 0.8pps Percent Break : 61% ±2%I	Interdigital pause : 1000ms Leakage during break : >50K
DTMF output	Tone Frequency Error : ±1.2% maximum Tone Level : -8 ±2dBm combined (typical)	High/Low tone difference : 4dB maximum
Memory stores	12 locations (0-9 plus * and #) plus last number redial	
Store capacity	16 digits per store	
PBX pause	3.6 seconds	
Power source	9V DC Alkaline or Lithium battery.	
Battery life	Typically 25 hours continuous use	
Power saving	Amplifier shuts off after approximately 5 minutes if there has not been a signal > -30dBm during that period. A signal >30dBm resets the timer.	
Speaker levels	Low, Medium, High	
PHYSICAL		
Length	26.0cm	
Width	7.0cm	
Height	8.8cm	
Weight	560g	
ENVIRONMENTAL		
Temperature	Operating : 0 ºC ~ +50 ºC	Storage : -40 ºC t~+66 ºC
Altitude	Up to 304 metres	
Relative Humidity	5% ~ 95%	
COMPLIANCE		
ACA Supplier Code	N692	
Australian Standards		
Classification	Test equipment - not for consumer use	

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