# **OSCILLATOR 87J** OPERATING INSTRUCTIONS

# **Battery Installation**

Loosen the two screws on the rear of the unit holding the battery compartment cover. Insert four new AA sized alkaline cells as indicated in the compartment.

Do not mix old and new cells or use any type other than alkaline. Ensure that the seal is free of dirt before closing the cover.

To avoid ingress of water ensure that the gasket is correctly seated when refitting battery cover.

## Operation

Oscillator 87J has only one control and two indicators.

#### Connections

Line connection is made using connecting cord 1/1500A. Three terminals are provided, the two nearest the front label provide a transformer coupled output that has a DC resistance of less than 10 ohms. To use this connect to Common and O/P.

The rear left terminal provides capacitor coupling of the 1 kHz AC signal and blocking DC up to 200V. To use this connect to DIS O/P and Common.

## Control

To switch on the unit press and hold the pushbutton for 1.5 seconds. The red LED will start flashing at the output tone rate. To switch off, press and hold the pushbutton for 1.5 seconds, no LEDs will be lit.

To select the tone rate press the pushbutton momentarily. There are 4 choices; the unit switches on at 5Hz, one press gives 8.5Hz, another press 11.5Hz, another press 3Hz. Further presses will repeat the cycle. The red LED flash rate changes to indicate the rate.

#### Low Battery

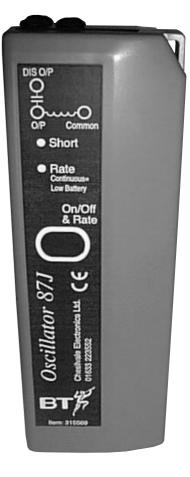
If the battery is running low the red LED will light continuously and the tone output also becomes continuous to warn the distant probe user. When this occurs there are at least two hours operation remaining.

## **Short Circuit Indication**

This oscillator can detect short circuits on the line up to 2km away. The green LED lights at selected cadence rate while the short is applied.

## Compatibility

This oscillator will operate with any version of Amplifier 109.







#### Pair tracing

Connect the oscillator across the pair to be traced. Check that the signal is being emitted correctly before leaving the connection point. Hold the probe near to the wires to check the signal.

At the far end bring the probe tip close to where you think the signal will be located. Signal will be found within a few centimetres of the target pair and will increase rapidly to maximum when the pair is contacted.

#### Cable location or cable identification

The Oscillator 87J may also be used to trace or identify cables using the Tester 453A. Follow the instruction for the Tester 453A, Item code 315036.

#### **Features**

- g Sine wave output at 1 kHz, (20mW into 1 k $\Omega$ ).
- q ON indicator Red LED.
- g Selectable output rate, 4 choices, 3Hz, 5Hz, 8.5Hz and 11.5Hz, shown by red LED.
- g Short-circuit indicator range up to 2 km, the green LED flashes in sympathy with the red LED.
- g DC path on output to allow loop testing with tone on (less than 10 Ohms).
- q Alternative DC Blocked output is available.
- g Battery low indicator Red LED lit continuously.
- g Battery low transmitted signal continuous output tone.

#### Accessories



CORD CONNECTING 1/1500 BLACK ITEM CODE 334906



CLIP TEST 44A BLACK ITEM CODE 314604 RED ITEM CODE 314603



ADAPTOR TEST 3A ITEM CODE 141735

Battery: LR6 (item code 192315) : 1.5 volt 2250mAh