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Technical Note TN-590

**Re-Calibration of  
T3000 Trunked Radio  
'L' Levels**

31 August 1999

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**Applicability**

Applies to T3030, T3035 and T3040 hand portable radios.

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## 1. Introduction

**Why Change?**

The receiver on the T3000 hand portable radio is very good. However, the radio can be receiving good signal strength from a distance that can not be reached by the radio's 4 or 5W transmitter.

When a customer operates a radio, they look at the signal strength indicator. If the signal strength is good, they expect to be able to make a call. When they can't, the radio is deemed to be faulty. This is far from true.

Therefore, the 'L' levels of the radio need to be changed so the signal displayed is relative to the output power of the T3000 trunked hand portable.

## 2. Re-Calibration.

### What to do.

The re-calibration of the L1 level to be done at a fully operational tech bench. The current version of T3000 calibration software will be needed as well as a test set or signal generator

- 1) Start up the calibration software and read the radio.
- 2) Go to the RSSI thresholds page (second from bottom)
- 3) The instructions tell you to set the signal generator up to  $-115\text{dB}$ . Instead, set the generator up to  $-108\text{dB}$  and press the button allocated to the L1 Threshold. The L2 Threshold calibration remains the same.
- 4) Program the calibration database into the radio.

The signal strength indicators will now perform within customer expectations. Please note that the SVC indicator operates on the levels derived by the L1 setting. Therefore the SVC indicator will now show loss of signal at signal levels below  $-108\text{dB}$  rather than  $-115\text{dB}$ .

## 3. Issuing authority

### Name and position of issuing officer

Barry Crates  
Mobile Radio Customer Support.