Technical Support
TECHNICAL NOTE

TECHNICAL NOTE TN-1084

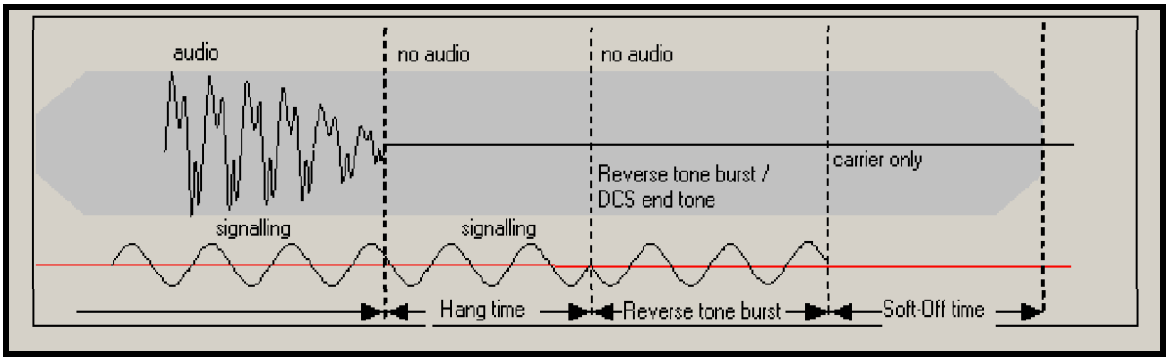
TM8100 Subaudible Signalling

12 September 2005

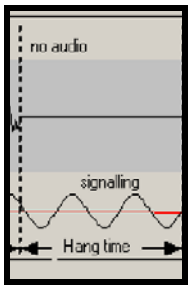
Applicability

This Technical Note details the subaudible signalling timing durations in the TM8100 from firmware v2.09 onwards and using field values programmed with TM8100 PC Application v2.90 (or later).

1. TM8100 Subaudible Signalling



The breakdown of the TM8100 encoded transmit audio and subaudible signalling can be seen above where values are set in the TM8100 PC Application as defined below:



After release of the TM8100 PTT **Hang time** includes:

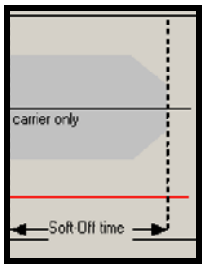
- PTT Deactivation Delay – In PTT > Advanced PTT
  Variable from 0 to 1000ms (default is 0ms).

THEN

- Trailing ANI (if used)
  Defined In Selcall > Free Format Bursts > ANI Sequence
  Sent by Networks > PTT Signalling > PTT Release > Signalling on PTT Release

Reverse tone burst is defined in:
Networks > Basic Settings > Subaudible Signalling > CTCSS Settings > Reverse Tone Burst Duration

Variable from 0 to 250ms, 0 disables this feature. Default is 130ms; this has been tested and found to be the most effective value across all CTCSS tones.
Setting this duration too long may cause receiving radios to 'reacquire' the transmitted CTCSS tone and open their receive mute again.



Soft-Off time is defined in:
Networks > Basic Settings > Subaudible Signalling > Lead Out Delay

Variable from 0 to 1000ms (default is 0ms).
This timing is generally not required as all radios should have muted the receive audio by now anyway.
Note: If users have Tx Inhibit set as Mute or Busy, ***no one else*** will be able to PTT over this lead-out duration.

Compliance Issues None.

CSO Instruction Inform all sales and service staff and dealers of the released information.

2. Issuing Authority

Name and Position of Issuing Officer Graham Brenchley
Technical Support Engineer

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Document History

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