

TECHNICAL NOTE TN-1146

Selcall Tones – Setting the Gap Period

1 February 2006

Applicability

This Technical Note details the method of choosing the correct Gap period for Selcall Tones – and why this is important even with no gaps in a format. This applies to TM8100 & TM8200.

1. Description

The default value in the TM8100/TM8200 Programming App. for Gap Period in a Selcall tone is 20ms. Adjusting this setting is often overlooked when selecting a Tone Period as many Selcall formats contain no gaps. However, if the Gap Period is much smaller than the Tone Period, when the receiving radio decodes the Selcall tone, small spaces that exist between characters will be decoded as Gaps.

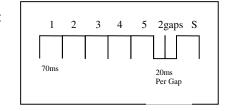
Basically, Gap Period needs to be the same length or longer than the Tone Period, whether there are Gaps present in the Selcall format or not.

For Example:

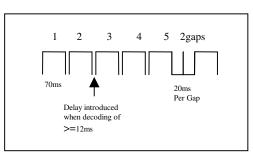
Tone Period 70ms Gap Period 20ms

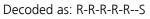
Selcall Encoded: RRRRR--S

Tone Sent:



Tone Received:





The 12ms spaces are read as gaps because they are 60% or more of the 20ms Gap period defined.

When Gap period is larger these spaces will be ignored and sequence will decode as intended, ie. ${\sf RRRRR--S}$

Ensure Gap Period is the same or longer than Tone Period.

Related Issues	See TN-938 for compatibility with T2000 issues.	
Compliance Issues	None.	
CSO Instruction	Inform all service staff and dealers of the released information.	

2. Issuing Authority

Name and Position of Issuing Officer	Simon Nieper Technical Support Engineer		
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