

## Programming Call List and Profile in Two-Tone

### F3400/F5400 and F52D Series

#### Introduction

This document shows how to program the Call List with Two-tone frequencies. Once the Call List is created, you can use it to create the Analog\_2-Tone\_Profile List, which allows you to assign that profile to the appropriate channels.

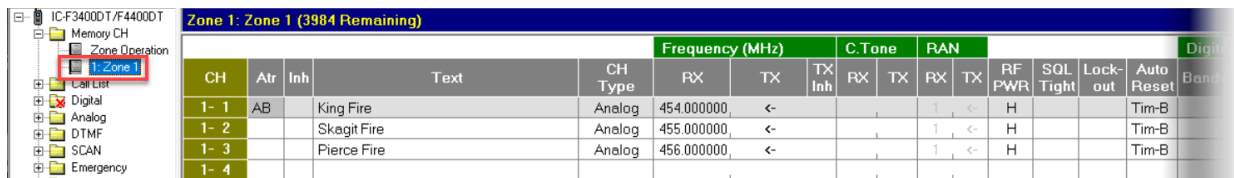
#### Programming

Assumption: Radio Model and Options are already entered as well as this radio's Individual ID.

Program in the following order:

1. **Zone 1 Screen:** Enter frequencies, Text, and CTCSS codes.
2. **Call List:** List all 2 tone frequencies for TX and RX.
3. **Analog-Two Tone Code CH:** Enter 2-Tone RX parameters.
4. **RX Code Settings:** Timers
5. **Analog Profile:** Enter in CH Mute choice (s)
6. **Return to Zone 1 Screen:** Assign proper System Profile and Analog Profile,

#### Zone 1 Screen



CH	Atr	Inh	Text	CH Type	Frequency (MHz)			C.Tone		RAN		RF PWR	SQL Tight	Lock-out	Auto Reset	Band
					RX	TX	TX Inh	RX	TX	RX	TX					
1- 1	AB		King Fire	Analog	454.000000	<-				1	<	H			Tim-B	
1- 2			Skagit Fire	Analog	455.000000	<-				1	<	H			Tim-B	
1- 3			Pierce Fire	Analog	456.000000	<-				1	<	H			Tim-B	
1- 4																

#### Setting

#### Action

<b>Text</b>	Enter descriptive text for each channel.
<b>Ch Type</b>	Select <b>Analog</b> for Analog operation.
<b>Frequency</b>	Enter RX and TX frequencies.
<b>C.Tone</b>	Enter desired CTCSS codes.

Analog					
Bandwidth	Com- pander	System Profile	Signal	Analog Profile	
N		1: Ch Mute-And	2-Tone	1: King	
N		1: Ch Mute-And	2-Tone	1: King	
N		1: Ch Mute-And	2-Tone	1: King	

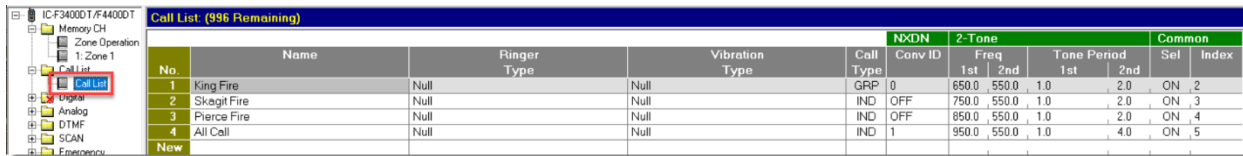
**Setting**

**Action**

<b>Bandwidth</b>	Select <b>N</b> for Narrow.
<b>System profile</b>	Leave at default.
<b>Signal</b>	Set to <b>2-Tone</b> if encoding 2-tone signals will be done by this radio.
<b>Analog Profile</b>	Leave at default.

**Call List**

This screen contains all 2 tone sets this radio will receive and/or transmit.



Call List: (996 Remaining)										
No.	Name	Ringer Type	Vibration Type	Call Type	NXDN		2-Tone		Common	
					Conv ID	Freq	Tone Period	Sel	Index	
1	King Fire	Null	Null	GRP	0	650.0 550.0	1.0	2.0	ON	2
2	Skagit Fire	Null	Null	IND	OFF	750.0 550.0	1.0	2.0	ON	3
3	Pierce Fire	Null	Null	IND	OFF	850.0 550.0	1.0	2.0	ON	4
4	All Call	Null	Null	IND	1	950.0 550.0	1.0	4.0	ON	5
New										

**Setting**

**Action**

<b>Name</b>	Enter descriptive text for each 2-tone set that might be used for receive and transmit. Any Group (single tones) should be entered here also.
<b>Ringer or Vibration Type</b>	Leave at default. 2-tone Ringer and Vibration is enabled in the <b>2 Tone Code CH</b> window.
<b>Call Type</b>	Enter the appropriate Call Type for each 2-tone signal. Generally, this will be an Individual call composed of 2 tones.
<b>NXDN Conv ID</b>	Not used.
<b>Sel</b>	Enable or disable each ID for the ability to select each tone set from the radio Display Menu.
<b>Index</b>	Index determines the sequence that each ID will appear on the display.

### Analog 2-Tone Code CH

The **2-Tone Code CH** window determines how the radio will react when receiving any of the 2-tone frequency sets listed in the **Call List** window.

CH	Tone	Text	Group Call	Bell	ANS	AUX	Ringer	Vibration
1	1	County	2nd	ON			PiRo1	OFF
2	2	CALL2	2nd	ON			PiRo1	OFF
3	3	CALL3	2nd	ON			PiRo1	OFF
4	4	CALL4	2nd	ON			PiRo1	OFF
5	4	CALL5	2nd	ON			PiRo1	OFF
6	4	CALL6	2nd	ON			PiRo1	OFF
7	4	CALL7	2nd	ON			PiRo1	OFF
8	4	CALL8	2nd	ON			PiRo1	OFF
9	4	CALL9	2nd	ON			PiRo1	OFF
10	4	CALL10	2nd	ON			PiRo1	OFF
G	—	GROUP	—	Blink			Pi	OFF

**Setting**

**Action**

<b>Tone</b>	Enter the tone set line numbers as listed in the <b>Call List</b> window. As an example, Tone 1 points to the King County frequency set listed in the <b>Call List</b> window.
<b>Group Call</b>	Enter the tone (the 1 <sup>st</sup> or 2 <sup>nd</sup> ) that will be used as a group call (long tone).
<b>Bell</b>	Enable the sound of a bell when a corresponding tone is received.
<b>ANS</b>	Enable ACK's when the 2-tone is received.
<b>Ringer and Vibration</b>	Enables Ringers and/or Vibrations when the corresponding tone sets are received.

### 2-Tone RX Code Setting

2-Tone RX Code Setting	
<b>Timer</b>	
No tone (Sec)	0.080
Group (Sec)	3.000
Tone Decode Comparison: ON	

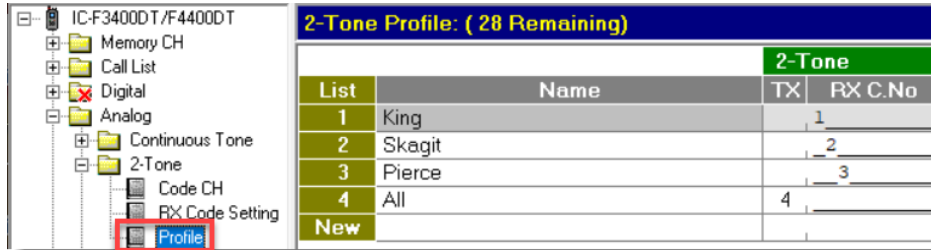
**Setting**

**Action**

<b>No Tone</b>	The period of time between the 1 <sup>st</sup> and 2 <sup>nd</sup> tone. Leave at default.
<b>Group</b>	When the Group tone is longer than this timer, radio perceives it as a Group call.
<b>Tone Decode Comparison</b>	Leave at <b>ON</b> so that the radio requires the CTCSS and the 2-tone before the radio decodes the 2-tone. If set to <b>Off</b> , the radio will decode a 2-tone even if the CTCSS does not match.

## 2-Tone Profile

Determines the 2-tone signals to be received and transmitted on each channel. Multiple 2-tones can be received on a given channel.

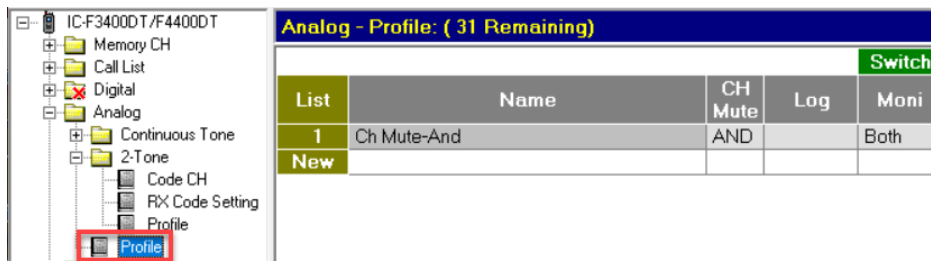


### Setting

### Action

<b>Name</b>	Enter the descriptive names from the <b>Call List</b> window.
<b>2-Tone TX</b>	Enter the tone set from the <b>Call List</b> window of sets that might be transmitted.
<b>2-Tone RX-C. No</b>	Enter the RX tone sets applicable to each profile. More than one is acceptable. This allows one channel to decode more than one 2-tone sets.

## Analog-Profile



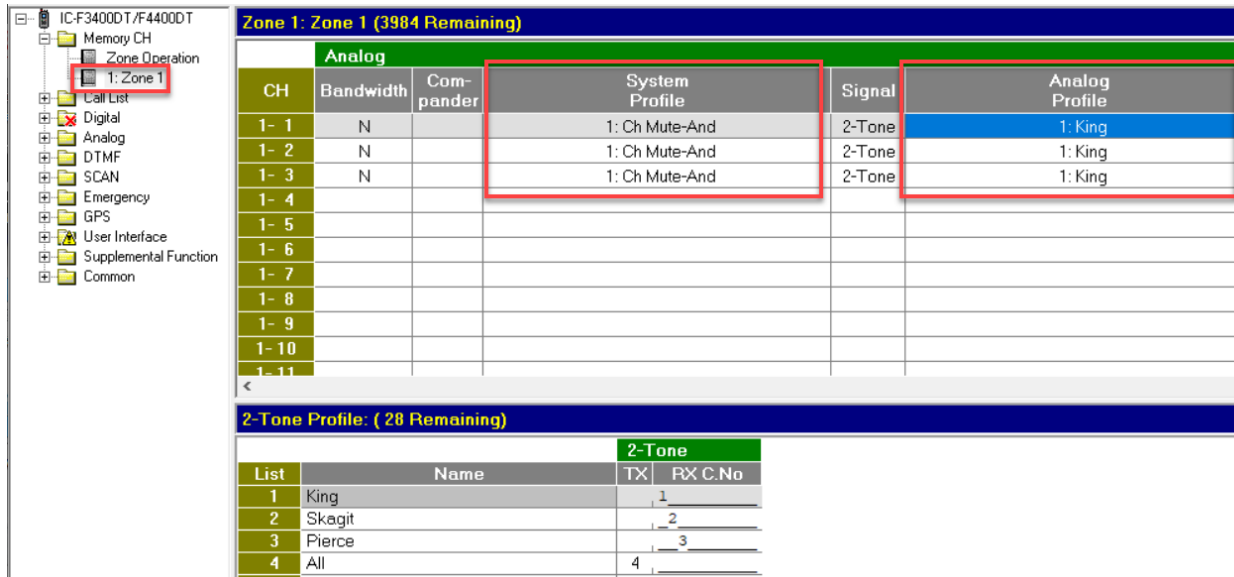
### Setting

### Action

<b>Name</b>	Enter the descriptive names for each CH Mute profile.
<b>CH Mute- AND</b>	<ul style="list-style-type: none"> <li>The Radio won't decode unless the matching 2-Tone is received.</li> <li><b>OR</b> The radio decodes incoming signals even if a 2 Tone signal isn't received.</li> </ul>

### Return to Zone 1 Screen

Return to Zone 1 Screen to add profiles.



#### Setting

#### Action

#### System Profile

Select the applicable muting characteristics for this channel.

#### Analog Profile

Select the **Analog Profile** that best describes the 2-tone sets that this frequency will use.