

UNICATION G4 WHITE PAPERS

A Simplified Programming Guide



Unication

Created 1/26/16

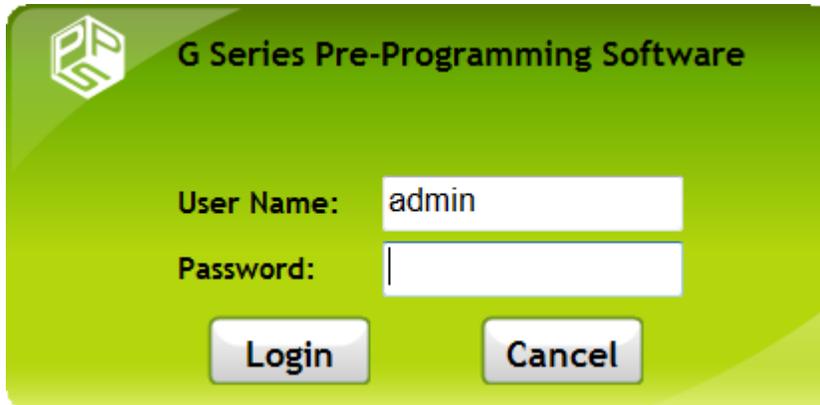
Thank you for purchasing the Unication G4 Voice Pager. This document is meant to assist you in creating a G4 Profile from scratch. At any time during this process if you have questions or require additional assistance please contact us at 817-303-9320 and select Option 1: P25 Support.

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LOADING THE PAGER PROGRAMMING SOFTWARE

- I. The first thing that we encounter when opening the G4 PPS is the login screen. The username is admin, the password is also admin.



- II. When the PPS opens we find ourselves on the welcome page. From this page we can perform a “quick program” using the latest programmed files. However in this document we are focusing on creating a profile from scratch. So we need to select **Tab C**



#	Name	Band	Created Date	Last programming time	
1	Beta July15	700/800 & VHF	7/13/2015	8/5/2015	Program
2	Harris Demo	700/800 & VHF	7/27/2015	7/27/2015	Program

- III. After selecting Tab C we are presented 3 sub options C1, C2, and C3. C1 is Create New Profile this option should be selected when crating a profile from scratch. C3 is used when your G4/G5 has a file preprogrammed in it. We will be selecting Tab C1.

Welcome to G Series PPS

- Welcome**
Unication proudly introduces the G series voice pager. Our goal is to provide the best solutions for your wireless communications application.
- Version**
V0.2.4 R10
- For Pager Model**
G4, G5
- Lastest Programmed Profiles**

#	Name	Band	Created Date	Last programming time	
1	Beta July15	700/800 & VHF	7/13/2015	8/5/2015	Program
2	Harris Demo	700/800 & VHF	7/27/2015	7/27/2015	Program

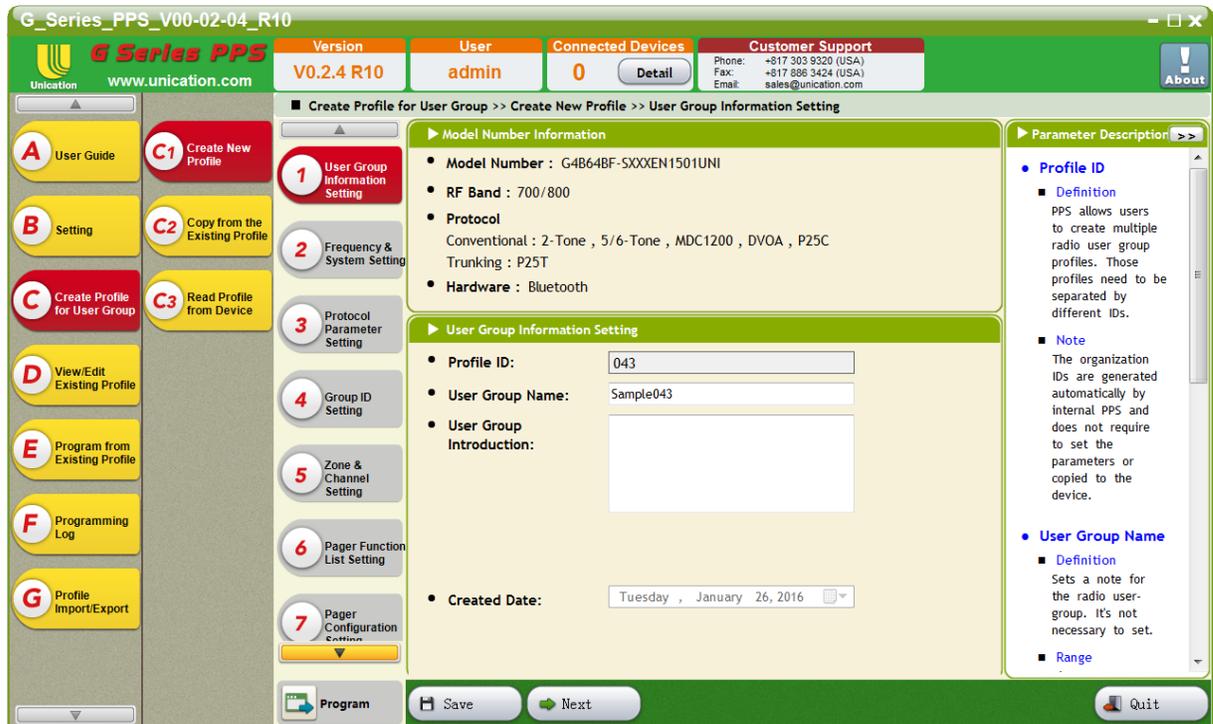
- IV. Once Tab C1 is selected you must then choose the model of your unit. You will have 3 choices 700/800, 700/800 + VHF, 700/800 + UHF. Your selection will be based on which unit you have.

Choose Model Number for this Profile

- Model Number :** G4B64BF-SXXXEN1501UNI
- RF Band :** 700/800
- Protocol**
Conventional : 2-Tone , 5/6-Tone , MDC1200 , DVOA , P25C
Trunking : P25T
- Hardware :** Bluetooth

Select Back

- V. Once you select your model number you will be presented with the main programming screen of the PPS.



- I. Tab 1 displays your file information, the User Group Name will be the name of the file when you go into Tab D to edit the file later on.

TAB 2- FREQUENCY & SYSTEM SETTINGS

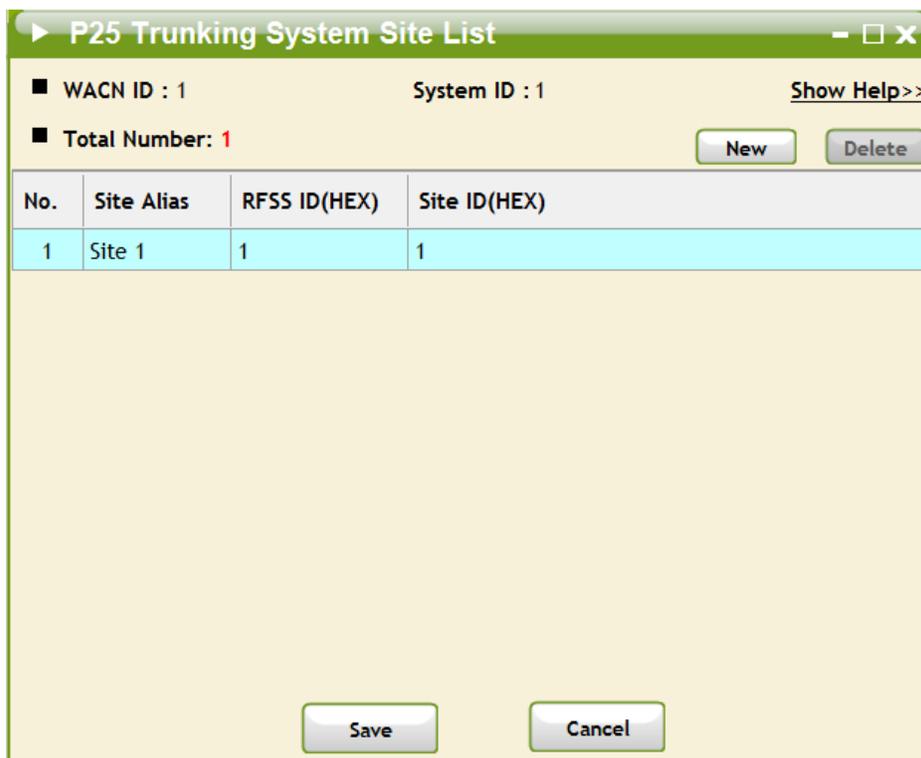
- I. Tab 2 is where you enter all frequencies and build your P25 trunking system.



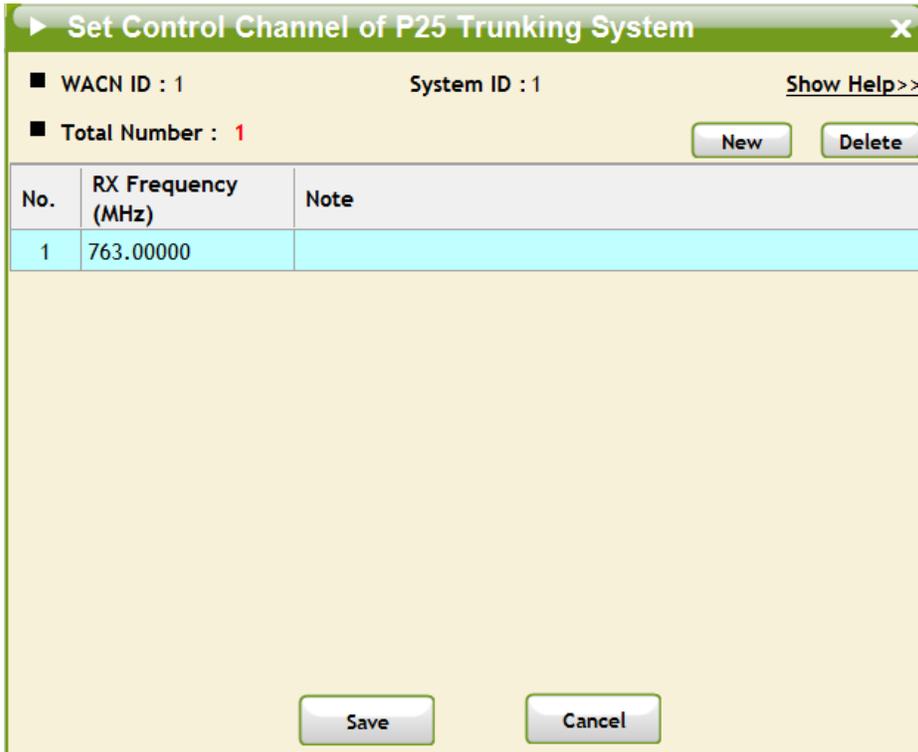
- II. To build your P25 trunking system you must select the grey tab at the top that says P25 Trunking System Setting. The information that you will need is the systems WACN ID, The System ID, the RFSS ID and Site ID's for each site along with the control channels for those sites. This information should be obtained through your system admin.



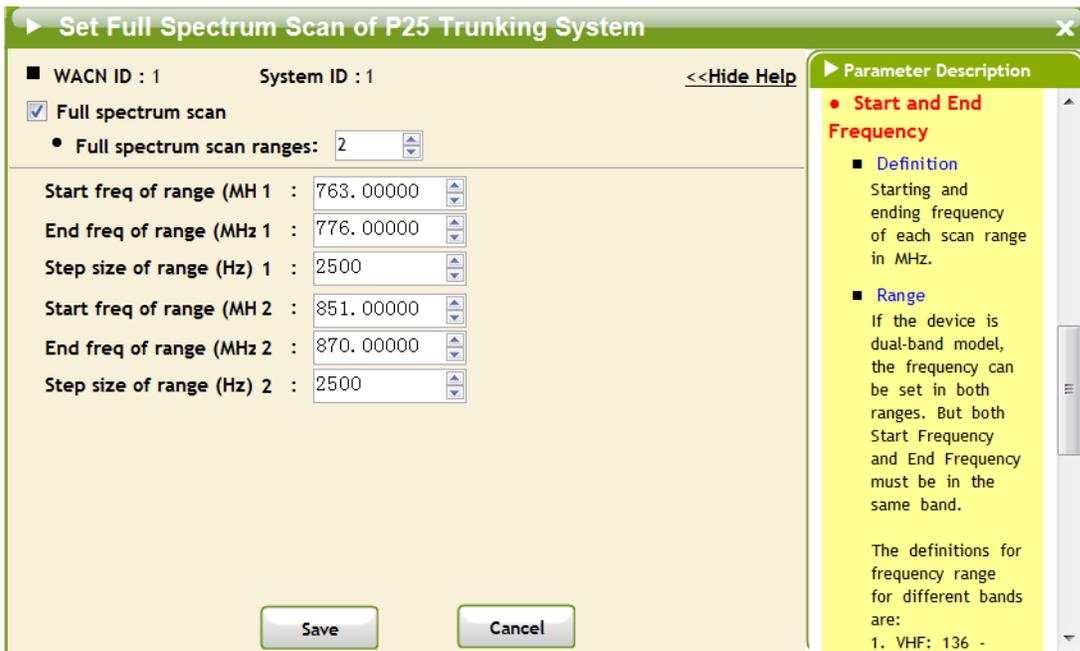
- III. To add Sites you will need to left click on **Site: 1** and enter the RFSS and Site ID's.



- IV. Adding control channels is a similar process Left Click on **Control CH: 1** and add the pertinent information.



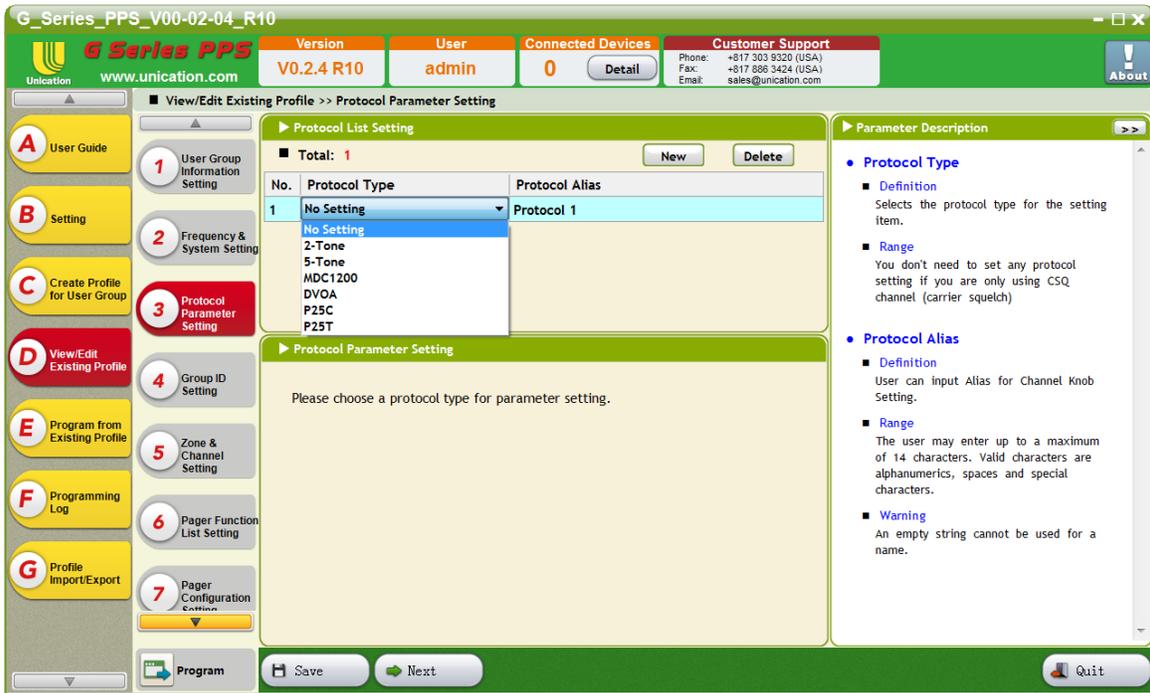
- V. Full spectrum scan is another feature that can be enabled here. In order for the unit to scan both the 700 and 800 band the full spectrum scan must be setup in this manner.



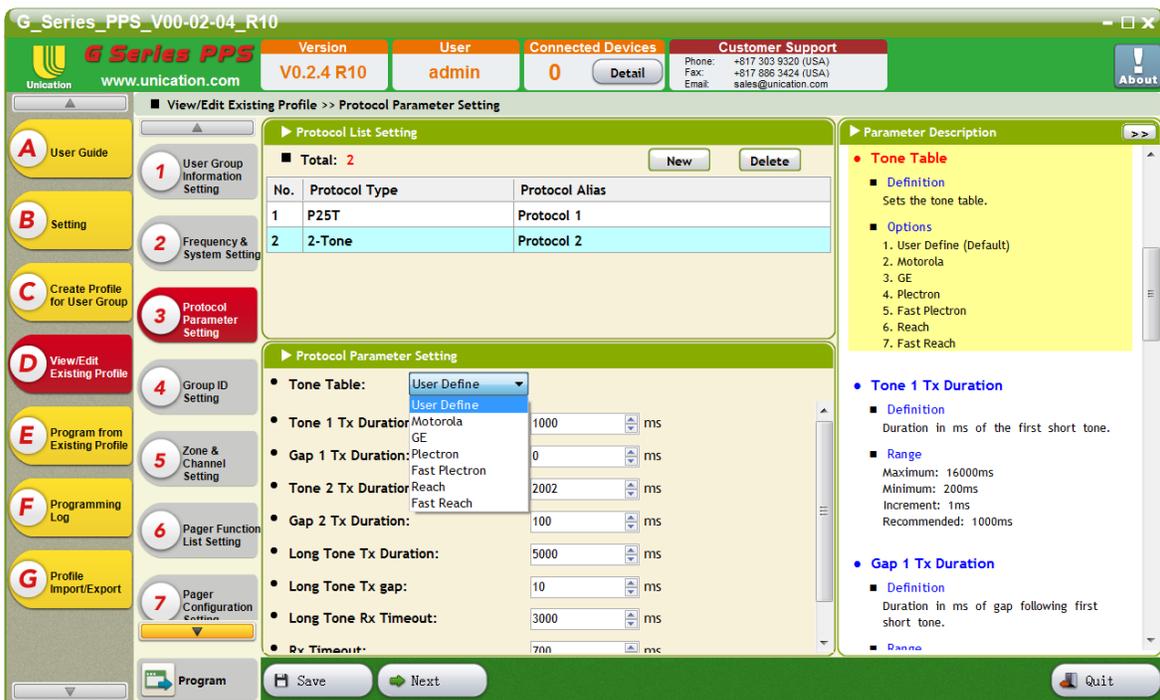
- VI. Once your Trunking system is built and your conventional frequencies have been entered, then we can move on to Tab 3 to setup our protocols.

TAB 3- PROTOCOL PARAMETER SETTING

I. Tab 3 is where we will setup our protocols. The G4 supports many different protocols as you can see below. For this explanation I will be adding P25T and 2-Tone.



II. When adding 2-Tone you will need to select which tone table to use. I will be selecting the Motorola tone table because it is the most widely used.



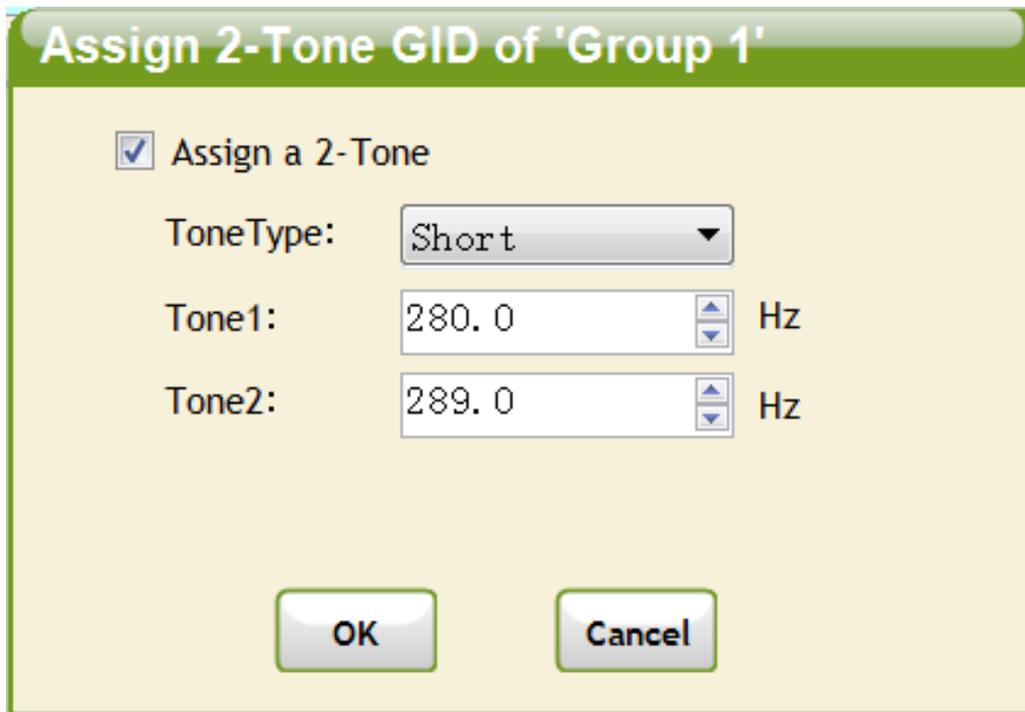
III. Upon selecting all of the parameters you're planning on using we will move on to Tab 4 which is the Group Id settings.

TAB 4- GROUP ID SETTING

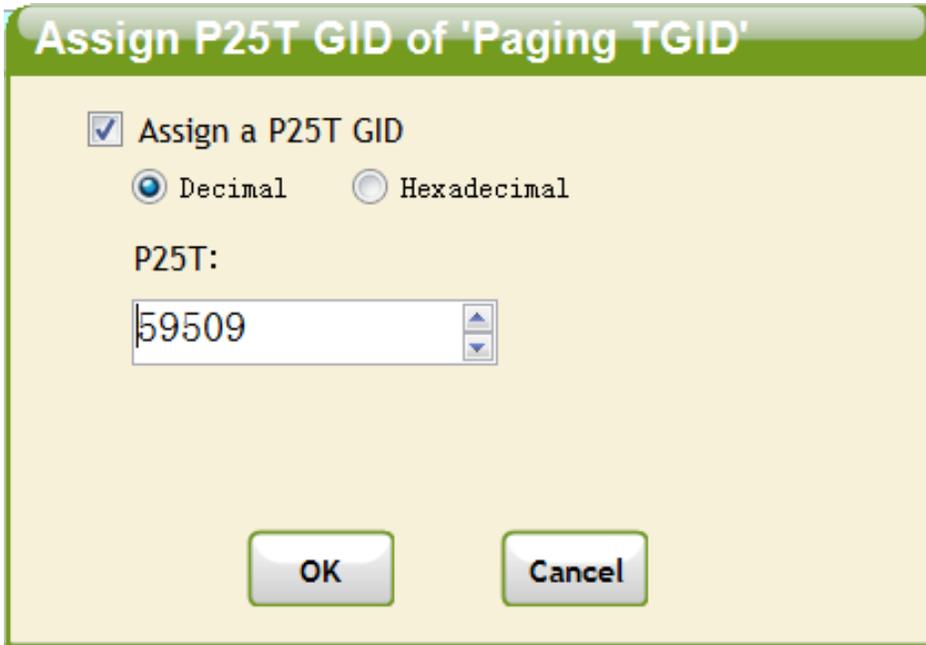
I. Tab 4 which is where you will set up your Group Id Settings.



II. First we will add our 2-Tone pair by clicking on the No setting option under 2-Tone.



III. Next we will add a Paging TGID so that we can be alerted over the P25 Trunking system.



IV. After adding all of my TGID's this is what it looks like.



- V. As you can see I have alert tones enabled on the 2-Tone, and the Paging TGID. I do not have alert tones assigned to my TAC channels because if I did the unit would alert every time there is traffic on that TGID.

The G4/G5 can also use custom alert tones via the Custom Tone Setting Menu.

The screenshot displays the G Series PPS software interface. The top status bar includes the version (V0.2.4 R10), user (admin), and connected devices (0). The main window is titled "View/Edit Existing Profile >> Group ID Setting". The left sidebar contains navigation options: A User Guide, B Setting, C Create Profile for User Group, D View/Edit Existing Profile, E Program from Existing Profile, F Programming Log, and G Profile Import/Export. The central area is titled "Custom Tone List Setting" and contains a table with columns for No, Tone Alias, Tone File, and Tone File Name. The table is currently empty, with a "Total 0" indicator. The right sidebar is titled "Parameter Description" and provides details for "Tone Alias", "Tone File Name", "Tone File", and "Stop File".

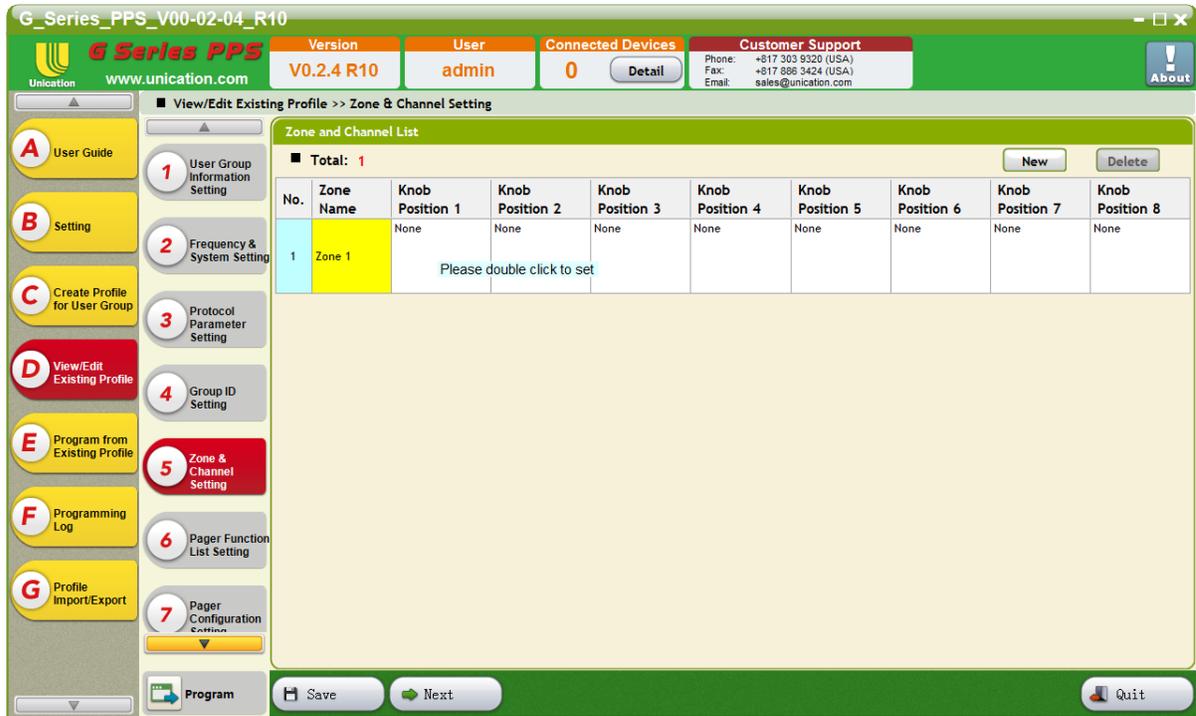
No	Tone Alias	Tone File	Tone File Name
1		Browse	
2		Browse	
3		Browse	
4		Browse	
5		Browse	
6		Browse	
7		Browse	
8		Browse	
9		Browse	
10		Browse	
11		Browse	
12		Browse	
13		Browse	

Parameter Description

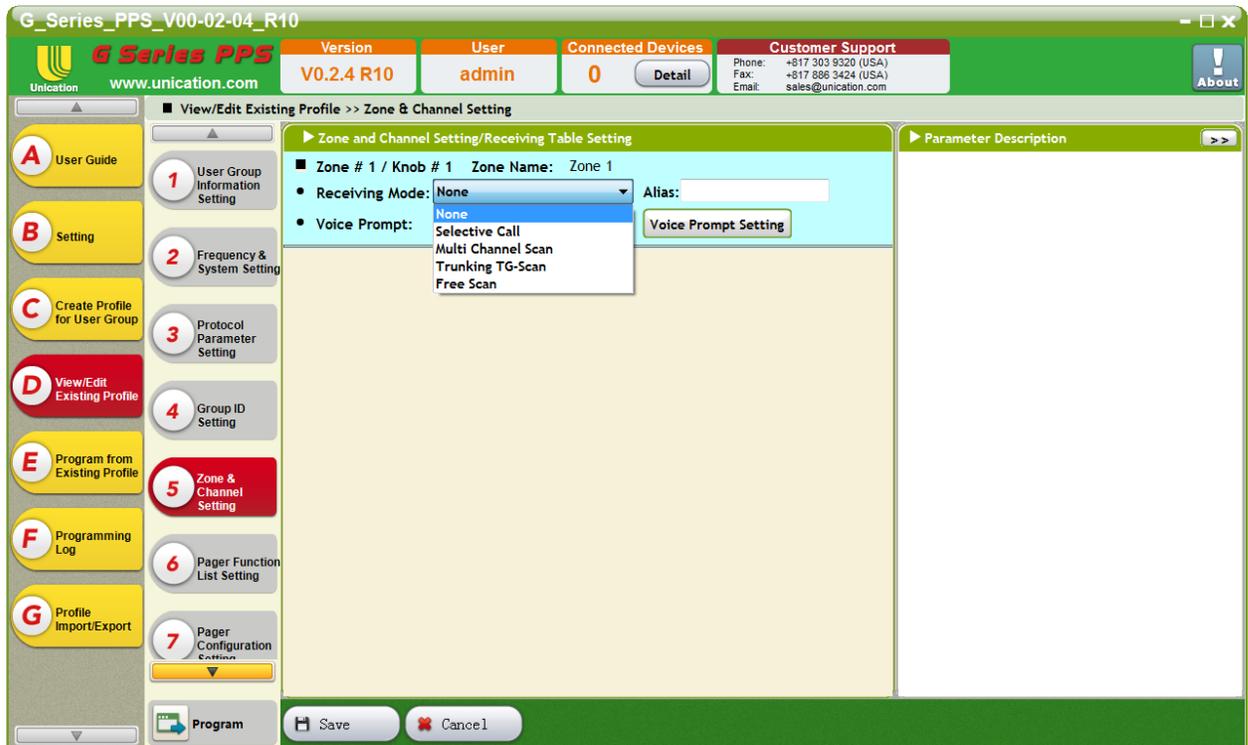
- Tone Alias**
 - Definition**: Allows you to enter Tone Alias.
 - Range**: The limit of Tone Alias is 25 character.
- Tone File Name**
 - Definition**: Show file name of the music file (MP3 or wav).
- Tone File**
 - Definition**: Provide user to click button for select the music file (MP3 or wav).
- Play File**
 - Definition**: Provide user to click button for play music file.
- Stop File**
 - Definition**: Provide user to click button for Stop playing music.

TAB 5- ZONE & CHANNEL SPACING

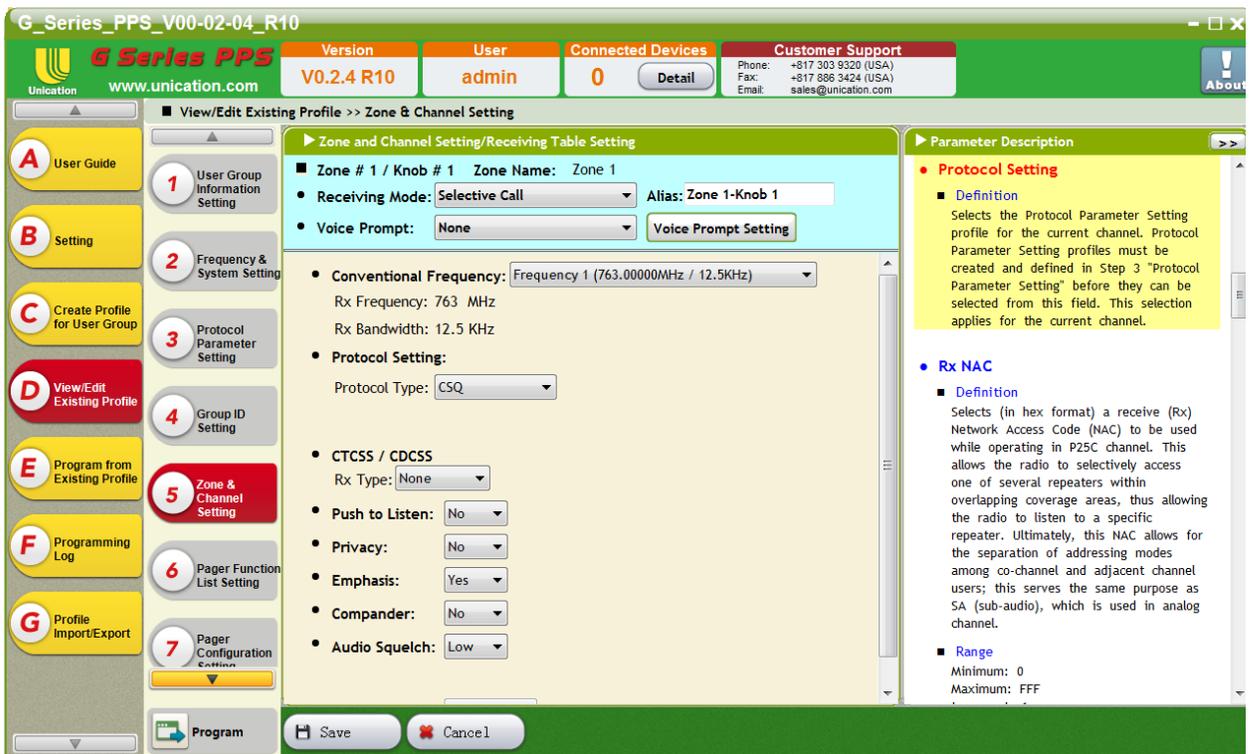
I. Tab 5 is where we will set up our function knobs.



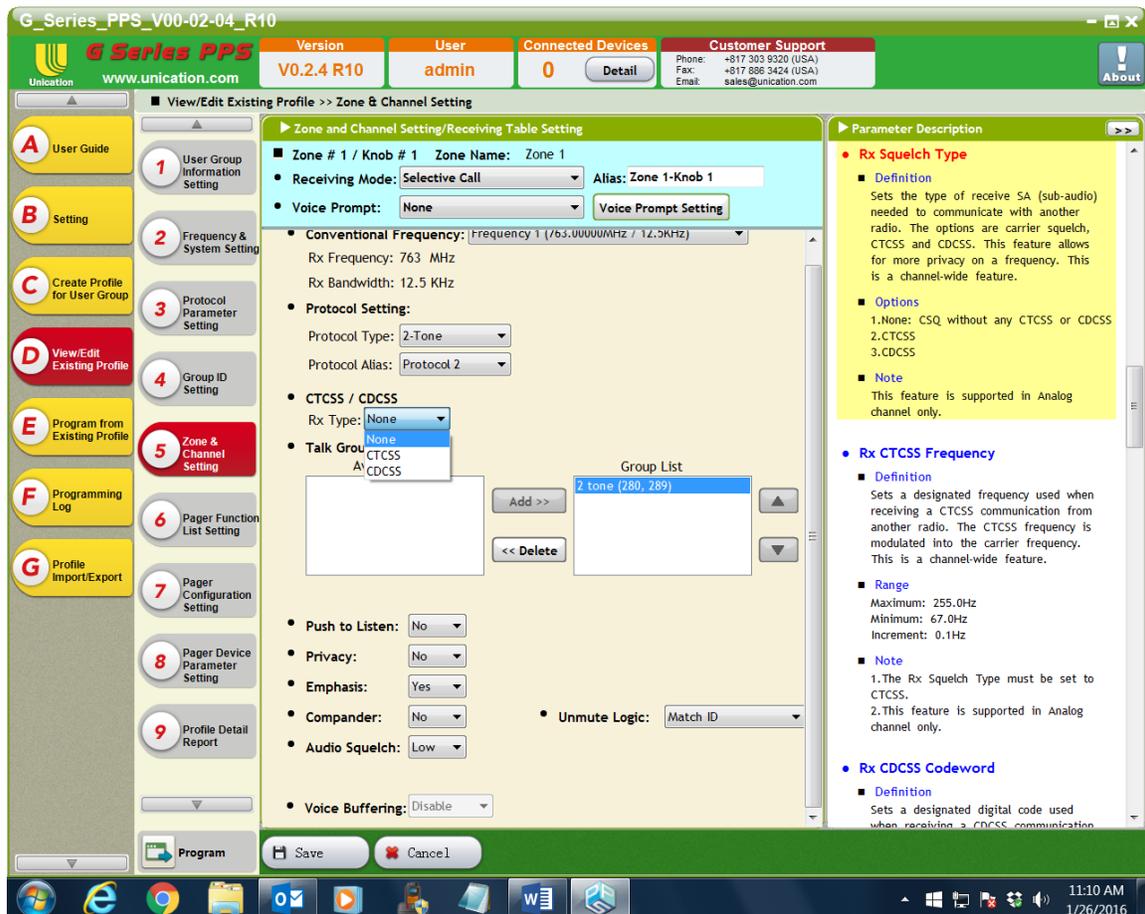
II. We will now setup our Function Knobs. Double click on Zone 1 Knob Position 1.



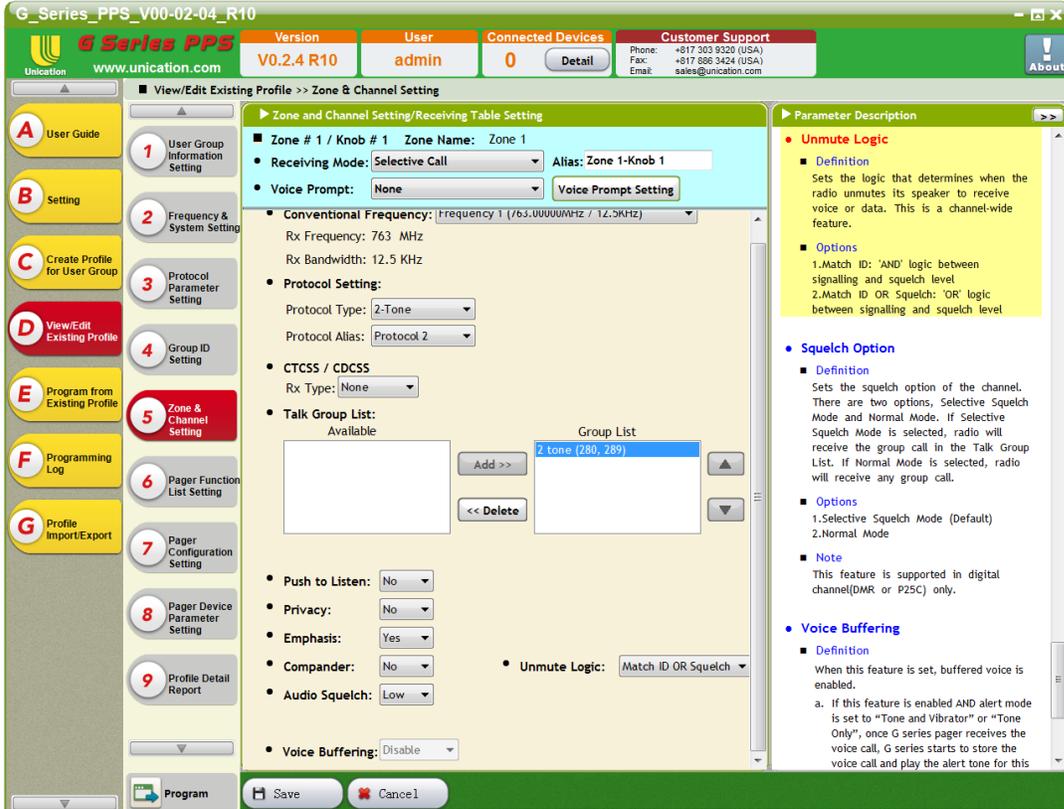
III. We will setup 2-Tone first by selecting selective call...



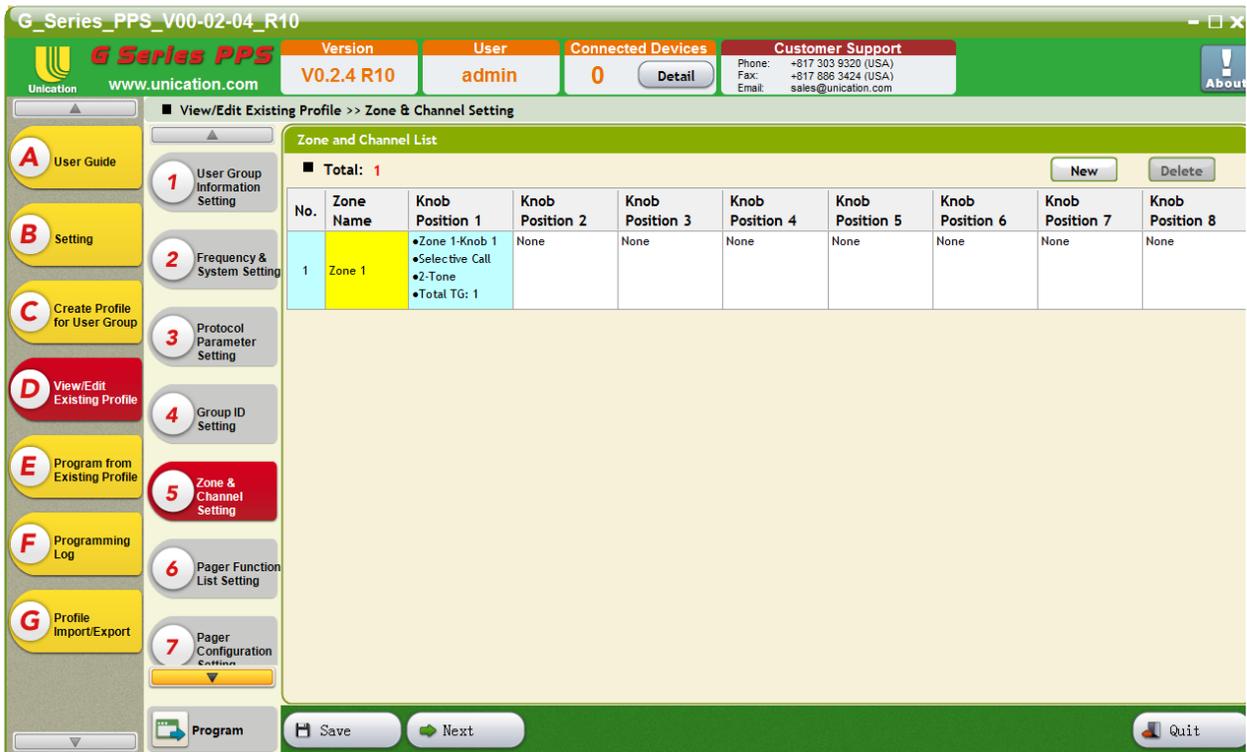
IV. We will go ahead and use 763.0000 as our conventional frequency. We will also select 2-Tone as our protocol.



- V. You can add CTCSS or CDCSS to this knob position from here. I have also assigned a 2-Tone pair to this channel knob. Now I will discuss Unmute Logic, If it is set to Match ID the pager will only open Squelch when the 2-Tone pair is received. If it's set to Match ID OR Squelch the unit will open squelch when there is traffic on the channel.



- VI. We will now save this Knob position...



VII. We will now setup our P25 Trunking system on knob 2.

G_Series_PPS_V00-02-04_R10

Version: V0.2.4 R10 | User: admin | Connected Devices: 0

Zone and Channel Setting/Receiving Table Setting

- Zone # 1 / Knob # 2 Zone Name: Zone 1
- Receiving Mode: Trunking TG-Scan | Alias: Zone 1-Knob 2
- Voice Prompt: Trunking TG Normal Scan | Voice Prompt Setting

Knob - Trunking System Setting

- P25 Trunking System: Trk Sys 1 (1 / 1, Sites:1, Control CHs:1)
- WACN ID DEC:1 HEX:1 | System ID: DEC:1 HEX:1
- Num. of Control CH 1 | Full Spectrum Scan: Enabled

Knob - Protocol and Signaling Setting

- Protocol Alias: Protocol 1
- Talk Group List:
 - Available: Paging TGID (59509), Tac 1 (59510), Tac 2 (59511)
 - List Members, Total: (Empty)
- Priority Talk Group ID Option:
- Announcement Group(ATG) ID: DEC HEX 0

Knob - Function Setting

- Audio Squelch: Low
- Push to Listen: No
- Voice Buffering: Enable

Parameter Description

- Voice Prompt**
 - Definition: Sets the voice prompt after switching to this channel knob.
 - Options: All options can be edited by "Voice Prompt Setting"
- P25 Trunking System**
 - Definition: Selects the P25 Trunking System profile for the current channel. P25 Trunking System profiles must be created and defined before they can be selected from this field.
- Protocol Type**
 - Definition: Selects the P25T Protocol Parameter Setting profile for the current system. Protocol Parameter Setting profiles must be created and defined in Step 3 "Protocol Parameter Setting" before they can be selected from this field. This selection applies for the current system.
- Talk Group List**
 - Definition: Assign a talk group which working on the current channel for both transmission and reception.
 - Note: You can only choose 1 group which has been assigned a GID of the protocol which current channel used in Step 4 "Group and Private ID Setting".

VIII. Adding TGID's to the Knob Position is simple just select it and click Add.

G_Series_PPS_V00-02-04_R10

Version: V0.2.4 R10 | User: admin | Connected Devices: 0

Zone and Channel Setting/Receiving Table Setting

- Zone # 1 / Knob # 2 Zone Name: Zone 1
- Receiving Mode: Trunking TG-Scan | Alias: Zone 1-Knob 2
- Voice Prompt: Trunking TG Normal Scan | Voice Prompt Setting

Knob - Trunking System Setting

- P25 Trunking System: Trk Sys 1 (1 / 1, Sites:1, Control CHs:1)
- WACN ID DEC:1 HEX:1 | System ID: DEC:1 HEX:1
- Num. of Control CH 1 | Full Spectrum Scan: Enabled

Knob - Protocol and Signaling Setting

- Protocol Alias: Protocol 1
- Talk Group List:
 - Available: (Empty)
 - List Members, Total: Paging TGID (59509), Tac 1 (59510), Tac 2 (59511)
- Priority Talk Group ID Option:
- Announcement Group(ATG) ID: DEC HEX 0

Knob - Function Setting

- Audio Squelch: Low
- Push to Listen: No
- Voice Buffering: Enable

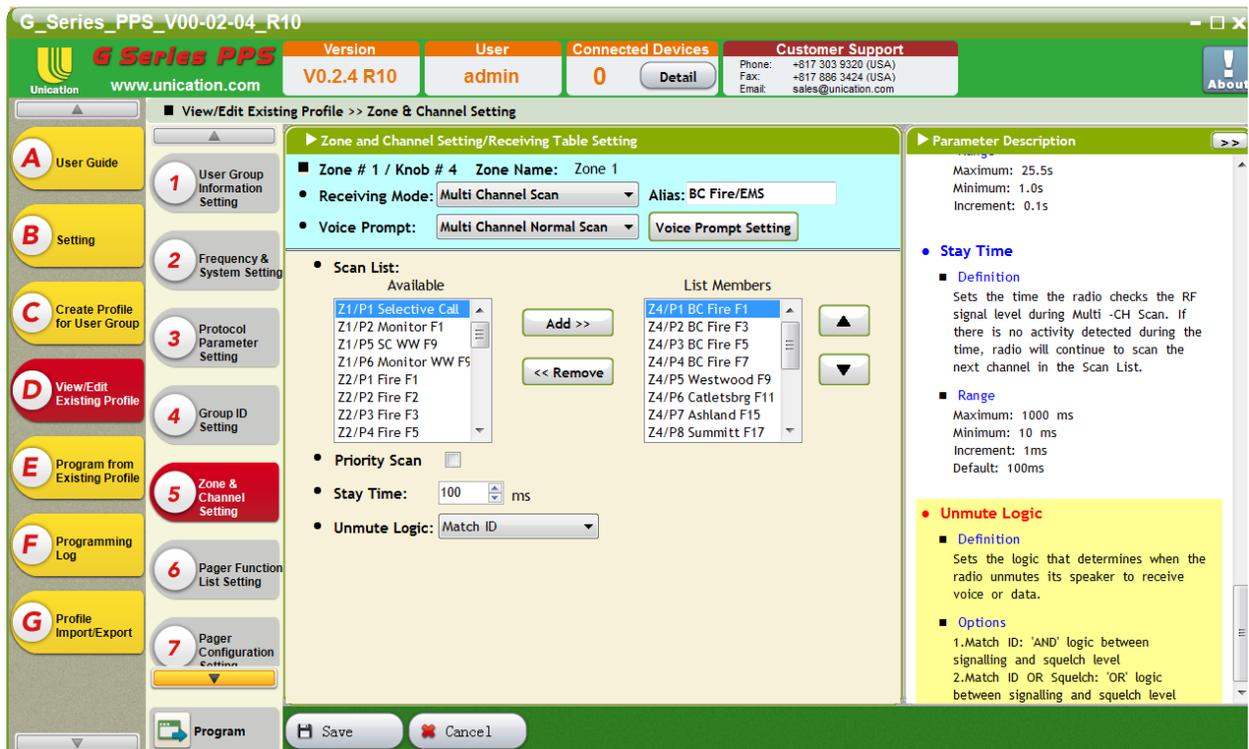
Parameter Description

- Voice Prompt**
 - Definition: Sets the voice prompt after switching to this channel knob.
 - Options: All options can be edited by "Voice Prompt Setting"
- P25 Trunking System**
 - Definition: Selects the P25 Trunking System profile for the current channel. P25 Trunking System profiles must be created and defined before they can be selected from this field.
- Protocol Type**
 - Definition: Selects the P25T Protocol Parameter Setting profile for the current system. Protocol Parameter Setting profiles must be created and defined in Step 3 "Protocol Parameter Setting" before they can be selected from this field. This selection applies for the current system.
- Talk Group List**
 - Definition: Assign a talk group which working on the current channel for both transmission and reception.
 - Note: You can only choose 1 group which has been assigned a GID of the protocol which current channel used in Step 4 "Group and Private ID Setting".

- IX. Priority can be enabled at this time, The TGID that is added first will be the priority. It is the TGID on the top of the list. We will now save this knob position. Setting up a conventional multi channel scan is handled in this manner.



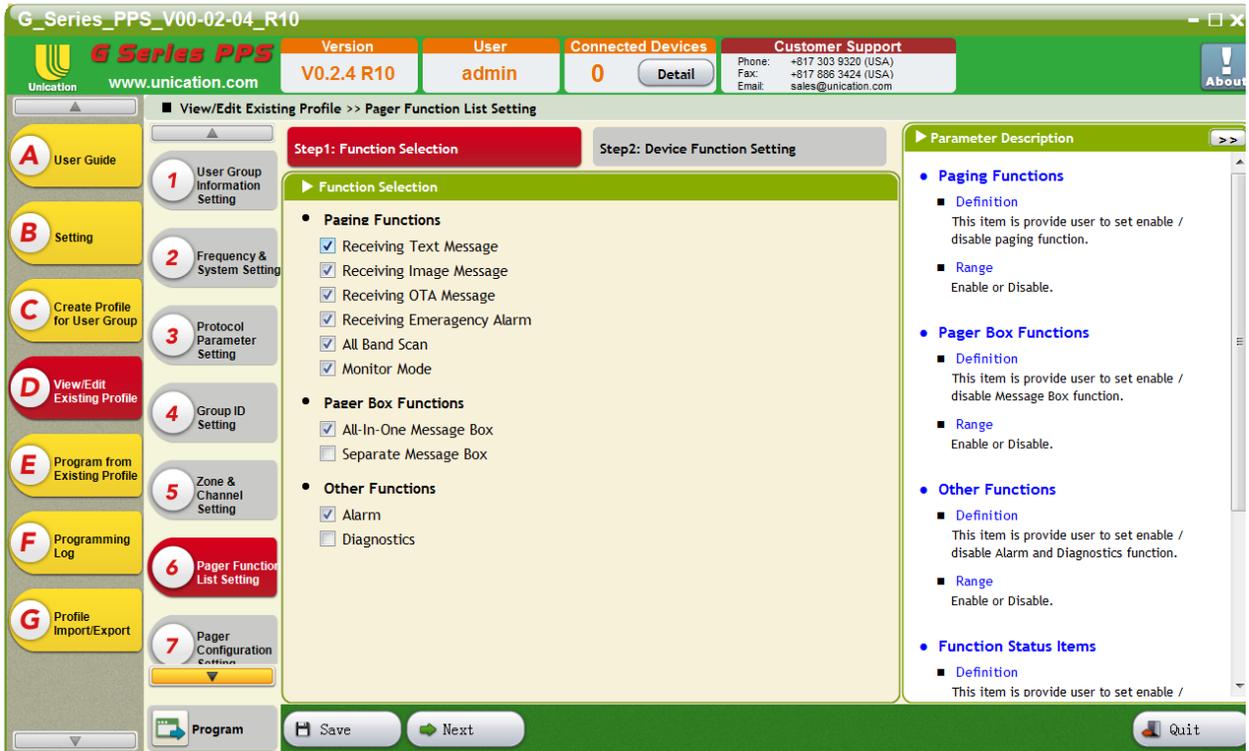
- X. Each channel you wish to scan must be setup on its own position Knob first, then it will be selectable in that setting. You can have Analog conventional and P25C channels in the same scan list.



- XI. The Unmute Logic on a Multichannel scan must be set to Match ID in order for the PL tones to work.

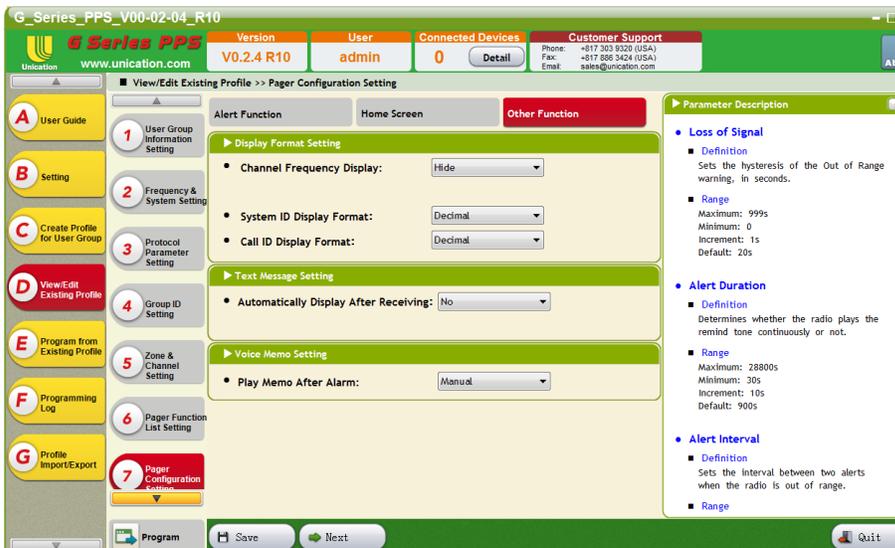
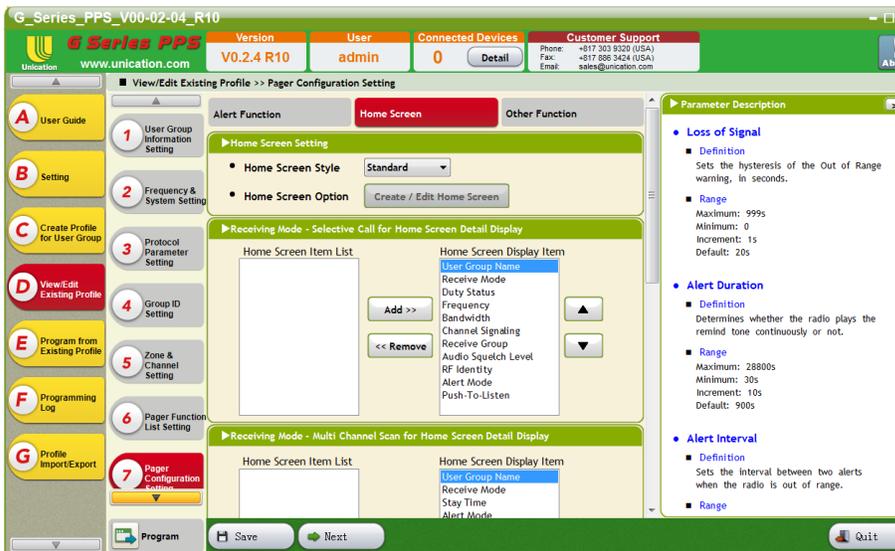
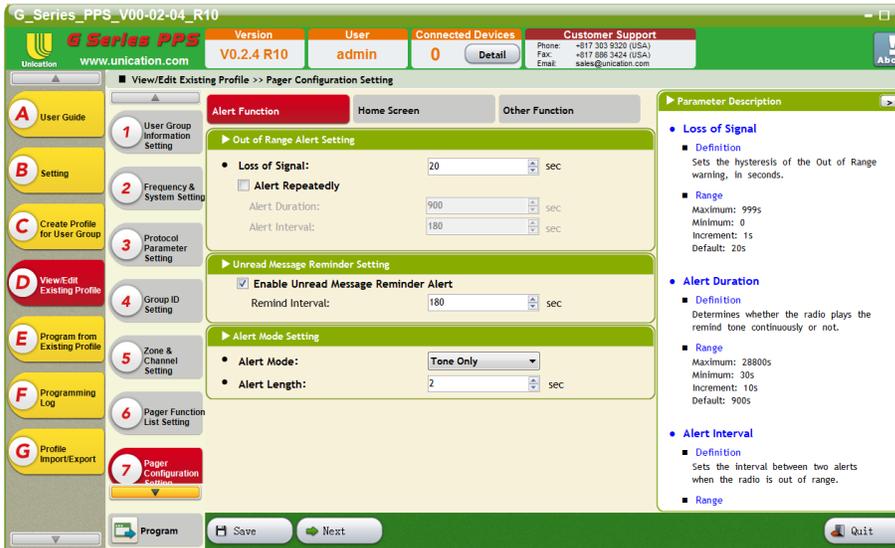
TAB 6-PAGER FUNCTION SETTING

I. Moving on to Tab 6, This is where you enable and disable some of the functions in the pagers menu.

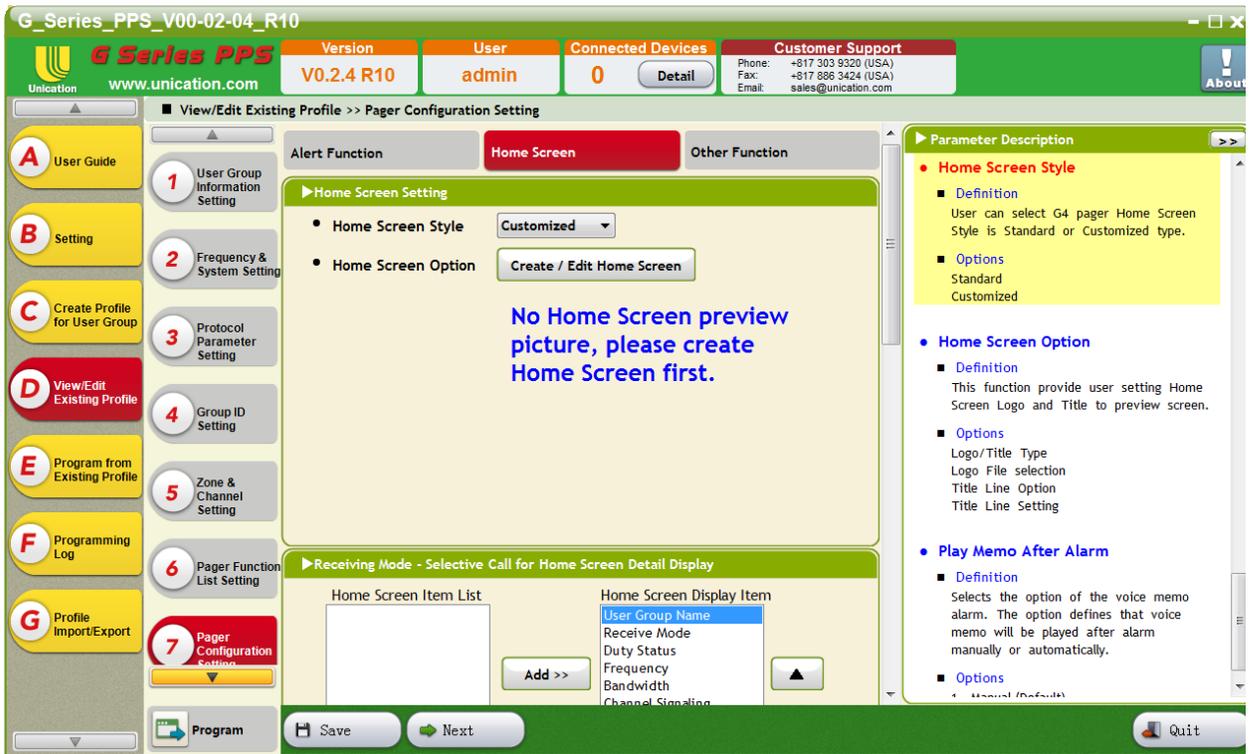


TAB 7- PAGER CONFIGURATION SETTING

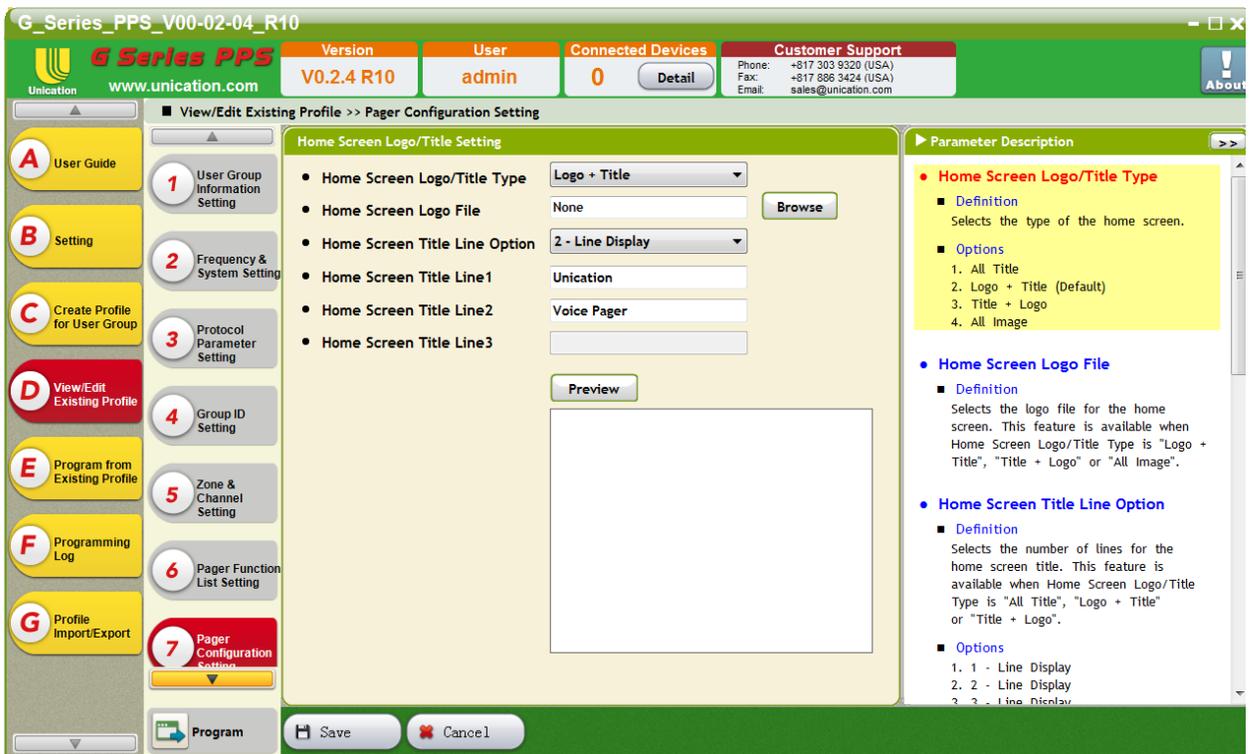
I. Tab 7 is where the display configuration settings are located



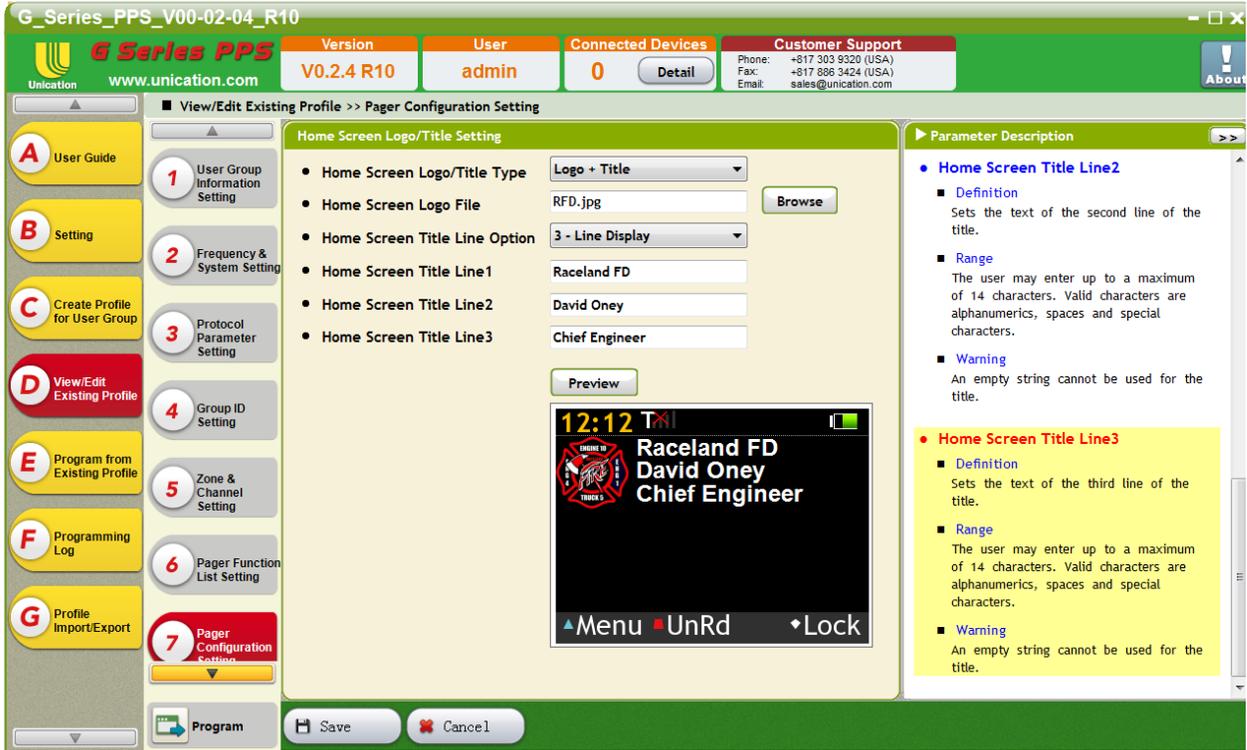
II. The Main feature I want to touch on is the Home Screen configuration.



III. This tab allows you to customize your Home Screen with .jpeg files.

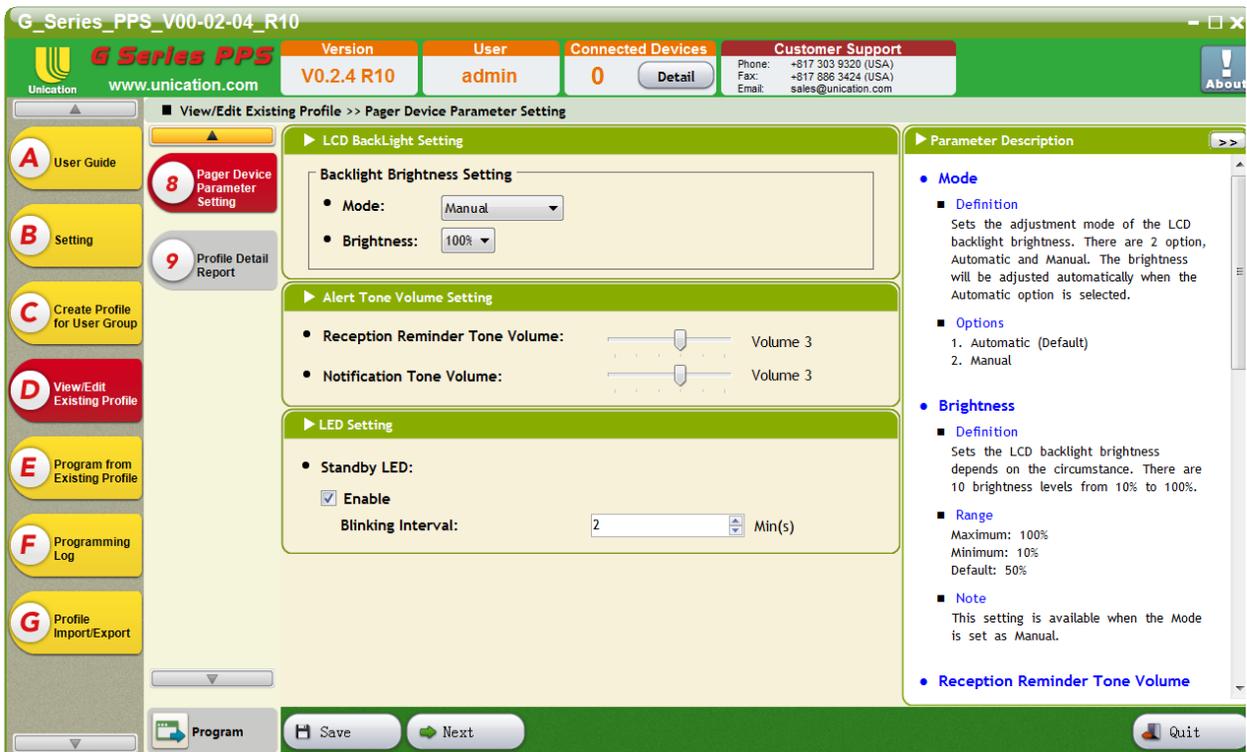


IV. Below shows a fully Customized Homescreen. This feature really allows you to Personalize the unit to your Department or your system or even the individual Fireman.



TAB 8- PAGER DEVICE PARAMETER SETTING

I. Tab 8 allows you to adjust the Backlight Settings, Alert Tone Volume, and the Standby LED setting.



TAB 9- PROFILE DETAIL REPORT

- I. Tab 9 shows you a detailed report of everything that you have programmed into the file.

The screenshot shows the 'Profile Detail Report' window in the G Series PPS software. The interface includes a top status bar with version (V0.2.4 R10), user (admin), and connected devices (0). A left sidebar contains navigation options A through G, with '9 Profile Detail Report' selected. The main content area displays the following sections:

- 1. User Group Information Setting**: Profile ID: 043, User Group Name: Sample043, User Group Introduction, Created Date: 1/26/2016.
- 2. Frequency & System Setting**:
 - 2-1 Conventional Frequency**: Total: 1, with a '+Detail' link.
 - 2-2 P25 Trunking System**: Total: 1, with a '+Detail' link.
- 3. Protocol Parameter Setting**: Total Protocol Number: 2, with a '+Detail' link.
- 4. Group ID Setting**:
 - 4-1 Group List**: Total: 4. A table lists 4 groups with columns: No., Group Name, Alert Tone, Voice Storage, 2-Tone, P25T GID, and Relay.

No.	Group Name	Alert Tone	Voice Storage	2-Tone	P25T GID	Relay
2	2 tone	Tone 1	Enable	Short Tone 1. 280 Hz 2. 289 Hz	No Setting	Off
3	Paging TGID	Tone 2	Enable	No Setting	59509 (DEC) E875 (HEX)	Off
4	Tac 1	None	Enable	No Setting	59510 (DEC) E876 (HEX)	Off
					59511 (DEC)	...

At the bottom of the window, there are 'Print' and 'Close' buttons.

CONNECTING THE USB TO PROGRAM THE DEVICE

- I. Last thing we need to do is program the unit. So, connect the unit to the PC with the supplied USB cable and select Program at the bottom of the page. You should show 1 Connected device at the top. At this time click the rounded program button on the PPS

The screenshot shows the 'Program' window in the G Series PPS software. The top status bar now shows 'Connected Devices' as 1. The left sidebar remains the same. The main content area displays the following sections:

- Programming**:
 - Profile Information**: A table with columns: No., User Group Name, Created Date, Band, and Status.
 - Programming Pager**: A table with columns: No., Model, and Serial No.

No.	User Group Name	Created Date	Band	Status
1	Sample043	2016-01-28 09:46	700/800	Finish

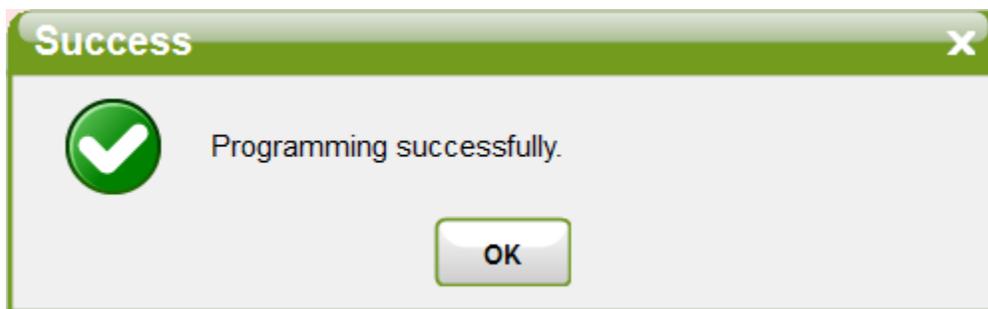
No.	Model	Serial No
1	G4B64BF-SXXXEN1501UNI	AG48590180

At the bottom of the window, there are 'Program' and 'Quit' buttons.

- II. The PPS will display this window.



- III. When you receive this message...



- I. The unit has been successfully programmed and will reboot itself. It is then safe to remove the USB cable.

Unication USA, Inc.

www.UnicationUSA.com