

# DMR CodePlug 101

## TYT Model MD-380

Code Plug Basics for the MD-380

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- Part I: Some Basic Concepts/Terminology
- Part II: So you got a new radio, now what?
- Part III: Code Plug management
  - Entering Contact Data
  - Creating Zones, Scan Lists and Channels
  - Programmable bells and whistles

# MD-380 CodePlug 101

Part I

Introduction to basic concepts

# Basic Concepts (1)

- **Code Plug:** This is the term used for the program that is loaded into the radio which will define its operational “personality”, in terms of Zones, Channels, Scanning, etc.
- **CPS (Customer Programming Software):** This is the term used for the Software that is used to create, load and maintain the “Code Plug”.

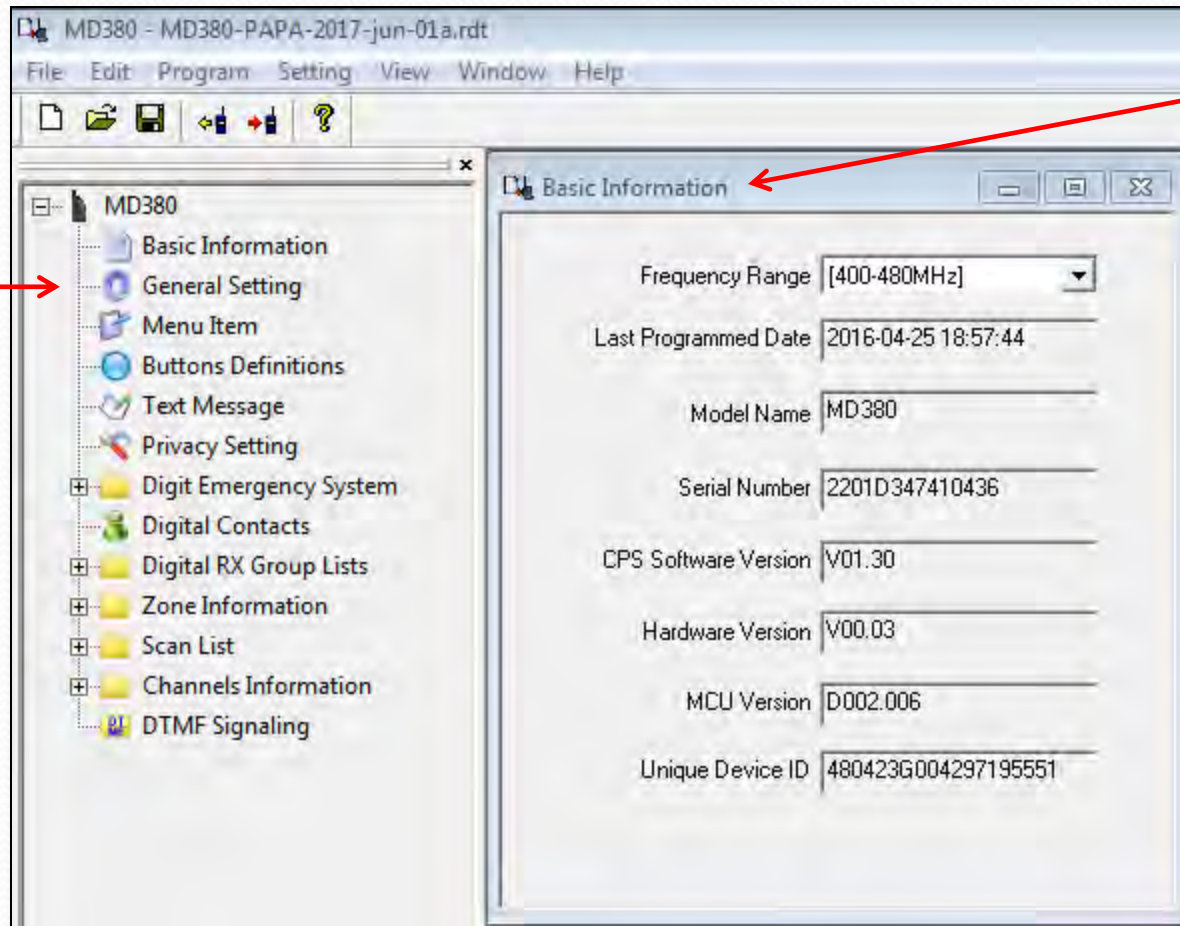
# Basic Concepts (2)

- Zones: Folders containing channels
  - Holds 16 channels (more in some radios)
  - Often dedicated to a physical repeater
  - Sometimes dedicated to a specific location
  - May contain DMR and Analog channels
- Channels: specific talk setup within a zone
  - Digital: Frequency, Color Code, Talk Group
  - Analog: Frequency, PL Tone/DCSS

# Basic Concepts (3)

- Scan Groups: Defines channels to scan
  - Each channel references a specific SG
  - There may be a max number of channels
  - Scan is usually focused on a specific Zone
- Contacts: DMR has three types
  - Private Call: User ID / Call Sign
  - Group Call: Talk Group Name / TG ID #
  - All Call: Calls anyone

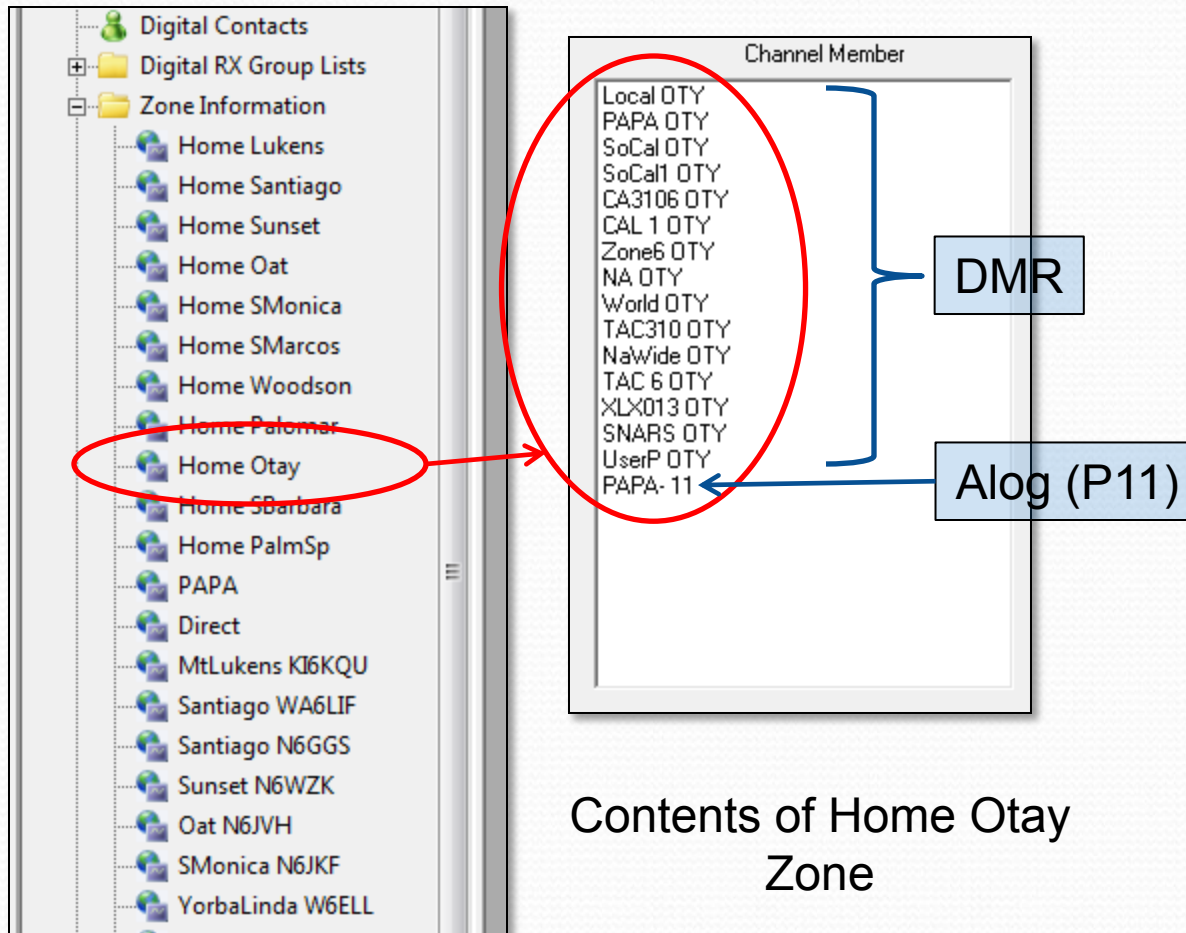
# MD-380 CPS opening Screen



Folder Tree

Information Panel

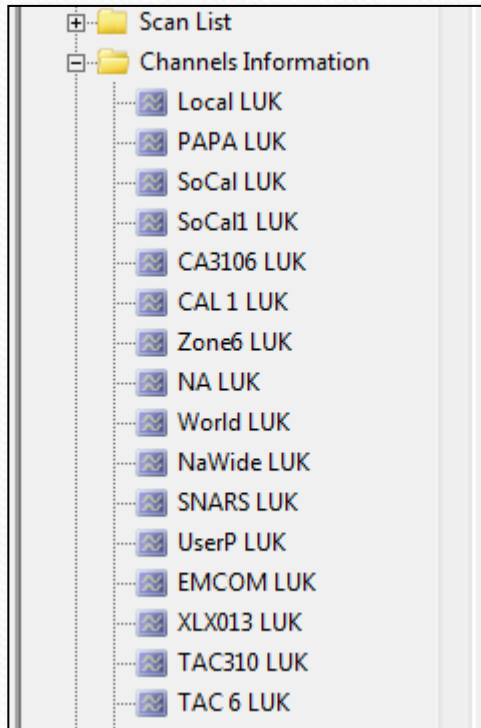
# Zones:



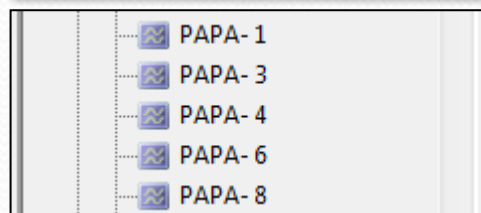
- A zone is a collection of channels (analog or digital) that are grouped together.
- Often (but not always) associated with a physical repeater like PAPA Otay.
- Think memory bank if you like



# Channels:



Digital Channels



Analog Channels

- Channels can be either Analog or Digital as shown.
- Channels are referenced by the Zone and the Scan lists
- Channels tell the radio the frequency pair, PLL/CTSS (analog), the Color Code and talk group ID (Digital), power level, timeout, Scan List, etc.
- In DMR you will likely end up with hundreds of channels
- Each channel can reference only one scan group but it can belong to multiple zones.

# Analog Channel detail:

**Channel BW** → Band Width

**Scan List** → Scan List

**Blab-off time out** → TOT[s]

**Power Level** → Power

**Analog/Digital** → Channel Mode

**Channel Name** → Channel Name

**RX Frequency** → RX Frequency(MHz)

**TX Frequency** → TX Frequency(MHz)

**Admit Criteria** → Admit Criteria

**Talk-around** → Allow Talkaround

**CTCSS (PL)** → CTCSS/DCS Dec

**CTCSS (PL)** → CTCSS/DCS Enc

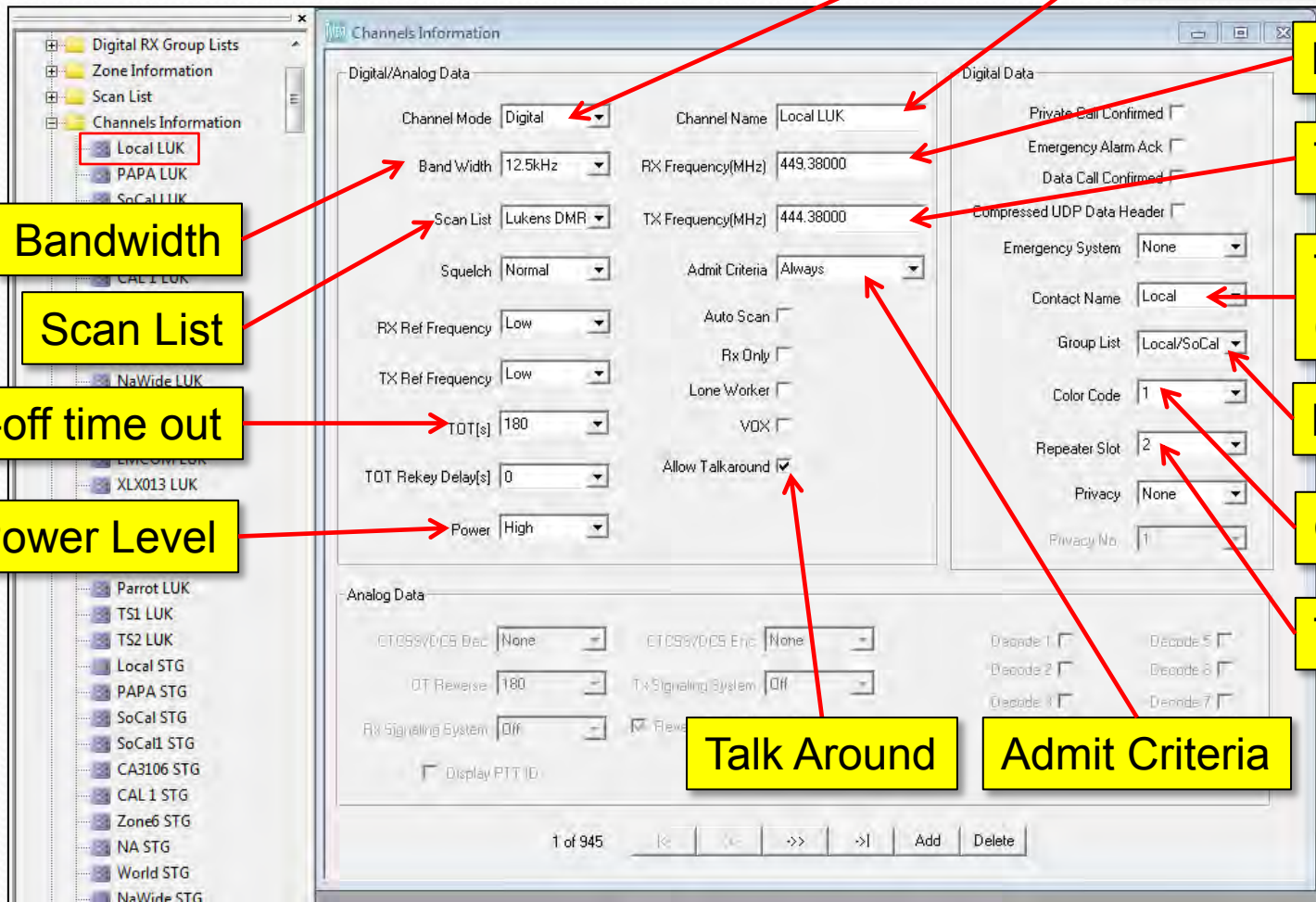
**CTCSS (PL)** → QT Reverse

**CTCSS (PL)** → Tx Signaling System

**CTCSS (PL)** → Rx Signaling System

**CTCSS (PL)** → Reverse Burst/Turn-off Code

# Digital Channel detail:



Analog/Digital

Channel Name

RX Frequency

TX Frequency

TX Contact (Talk Group)

RX Group List

Color Code

Timeslot

Bandwidth

Scan List

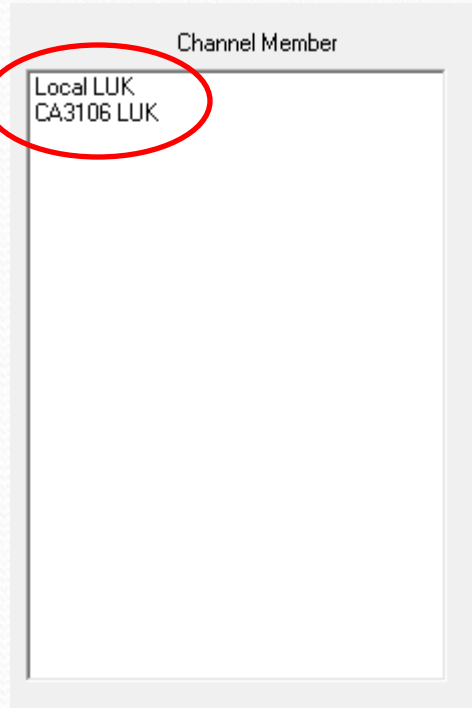
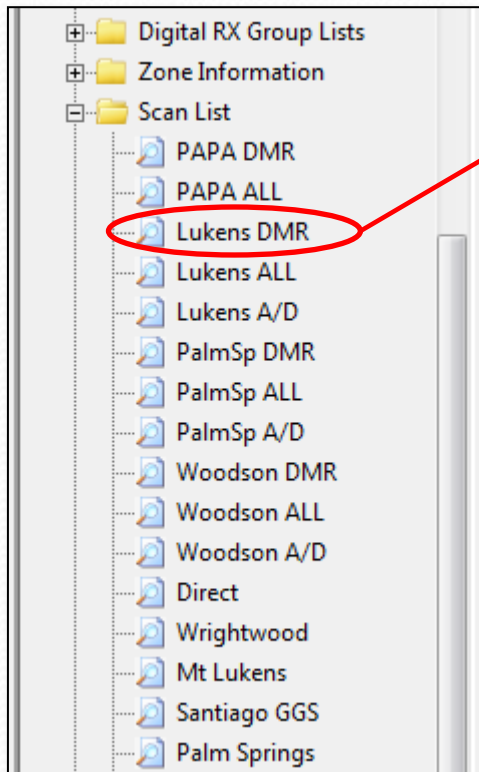
Blab-off time out

TX Power Level

Talk Around

Admit Criteria

# Scan Lists:



Contents of PAPA Lukens  
DMR Zone scan list

- A Scan List is a list of channels that will be scanned for a selected channel.
- Each channel can reference one (and only one) scan list.
- You can scan up to 16 channels in an MD-380.
- Generally, you will set up a scan list to scan some or all of the channels in a given zone.

# Contacts (group/private Calls):

No.	Contact Name	Call Type	Call ID	Call Receive Tone
1	Local	Group Call	2	No
2	PNW 2	Group Call	103187	No
3	MtWest1	Group Call	31063	No
4	WA 2	Group Call	103153	No
5	LOCAL1	Group Call	3181	No
6	LOCAL2	Group Call	3166	No
7	DCI1	Group Call	3160	No
8	DCI2	Group Call	3162	No
9	SOUTHWEST	Group Call	3176	No
10	SWEST 1	Group Call	31761	No
11	MOUNTAIN	Group Call	3177	No
12	NORTH AMERICA	Group Call	3	No
13	WORLD1	Group Call	1	No
14	WORLD ENGLISH	Group Call	13	No
15	ENGLISH 1	Group Call	113	No
16	204 Nederland	Group Call	204	No
17	FRENCH WORLD	Group Call	4	No

Add Delete

Example:  
North America, Call  
ID (TG)=3

Management Tools

# MD-380 CodePlug 101

## Part II

So, you got a new radio – now what?

(Saving your current code plug, loading a known good plug)

# New radio – first steps

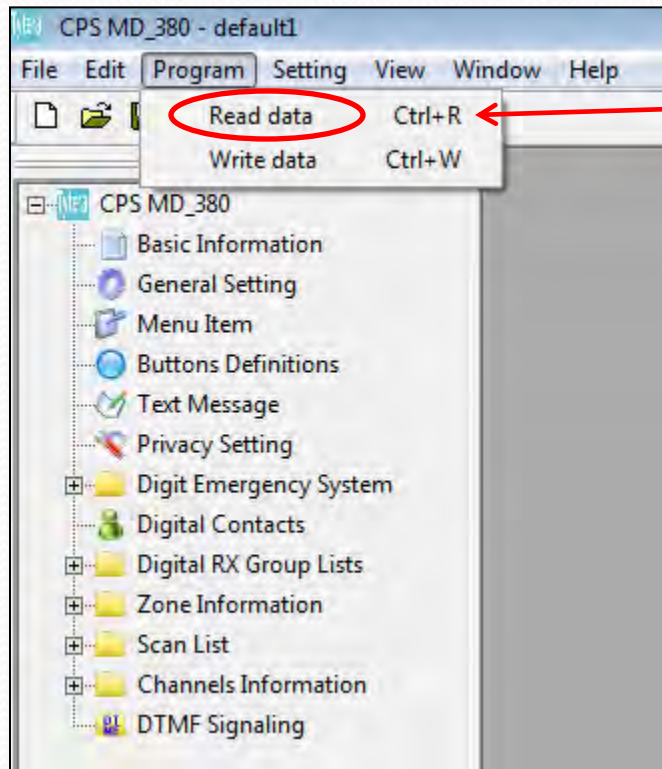
- Unpack radio and charge the battery
- Download and install the USB driver
- Download and install the CPS
- TYT Website: <http://www.tyt888.com/>
- Read your new radio and save the “virgin” code plug
- You now have a record of how your radio arrived new if you need it for some reason.

# New radio – first steps

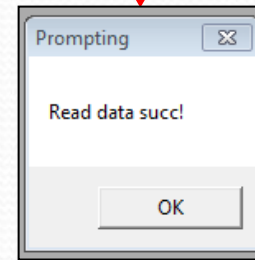
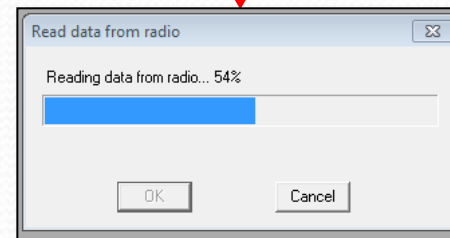
- Start the TYT CPS Program
- Connect the USB cable to your radio
- Connect the USB cable to your computer
- Turn on your radio, wait for the radio to connect.
- Always *read the radio* and *save the current code plug* before making any new changes.



# Save your initial code plug:



1. In CPS, Click “Read Data” or hit “Ctrl+R” to get the dialog
2. Click “Ok” and wait for completion

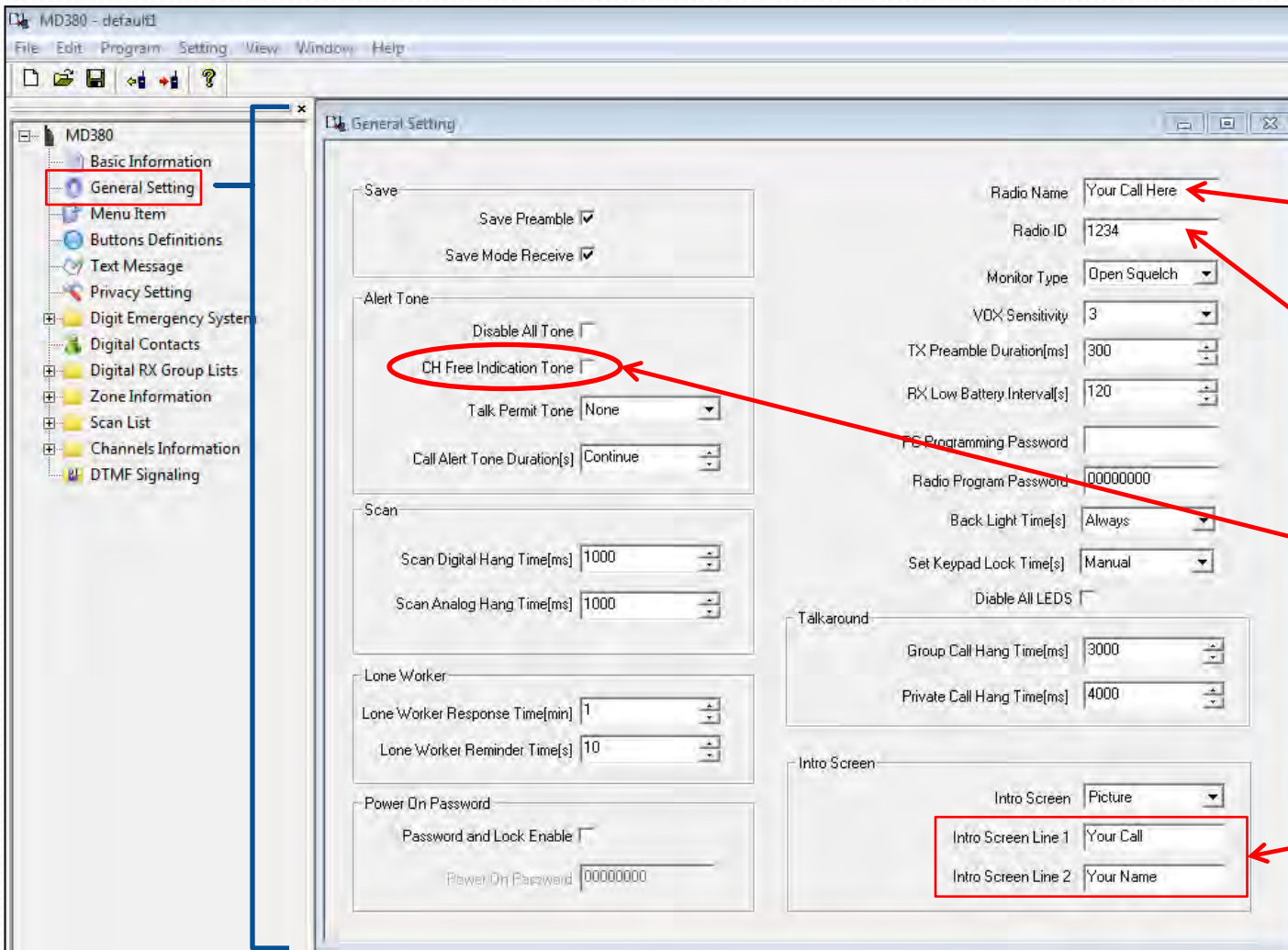


3. Click “File”, “Save As”, give it a name like “20170727\_YourCall\_MD-380\_VirginCP”. Now you have a record of the un-programmed code plug for reference.

# Load your new code plug

- Locate a code plug that you like
  - Download from a web site
  - From a friends radio
  - Write from scratch
- Add your particular parameters
  - Alias, Power On Message, DMR ID, etc.
- Flash the new code plug into the radio.

# Add your user data:



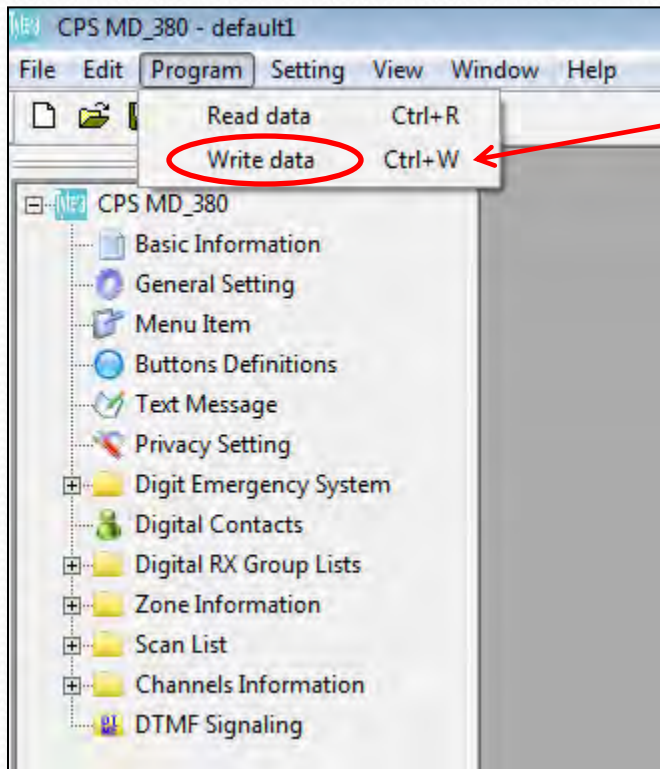
Radio Name  
(i.e. Your Call)

Your DMR ID

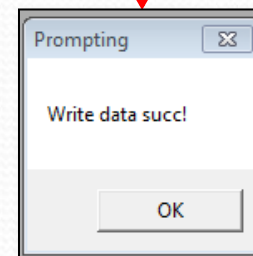
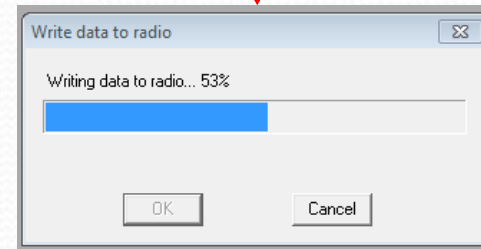
Maybe Yes?  
Maybe No?

Opening  
Message

# Load your new code plug:



1. In CPS, Click “Write Data” or hit “Ctrl+W” to get the dialog
2. Click “Ok” and wait for completion



3. Save your new code plug. Give it a name like “20170727\_YourCall\_MD-380”. So you have a copy of the code plug for reference and further customization.

# You should be good to go

- Make sure your analog channels work
- You can check the digital channels by looking at a “last heard” website such as Brandmeister.
- Pop onto California (or other active talk group) and ask for a radio check.
- If you have loaded a pre-built code plug, then you are done – enjoy your radio!

# MD-380 CodePlug 101

Part III

Code Plug management concepts

# Code Plug Creation

- The workflow for code plug creation is:
  - Enter your Name and User ID (Section II)
  - Enter the contact data (specifically the talk-groups). Private calls are optional.
  - Create a blank Scan List and a blank Zone
  - Create the channels for the zone
  - Populate the Zone and Scan Lists
  - Configure the programmable buttons
  - *Remember to save periodically*

# MD-380 CodePlug 101

Part IIIa

Code Plug Management Concepts  
(Creating and Managing Contacts)



# Contact Basics

- Contact information determines how your radio interacts with the DMR network
- Contacts come in four flavors:
  - **Private Call:** Calls to (or from) single radios (your “Contact List”)
  - **Group Call:** Calls to Groups of users (your selection of Talk Group ID’s)
  - **Broadcast Call:** Not used in Ham Radio
  - **All Call:** also Not used in Ham Radio

# Contacts (group/private Calls):

Double Click here

Example:  
North America, Call ID (TG)=3

The screenshot shows the MD380 software interface. On the left is a tree view with 'Digital Contacts' circled in red. A red arrow points from the 'Double Click here' text to this circled item. The main window displays a table of contacts. Row 12, 'NORTH AMERICA' with Call ID 3, is circled in red. A red arrow points from the 'Example' text to this row. At the bottom, 'Add' and 'Delete' buttons are circled in red, with a red arrow pointing from the 'Management Tools' text to them.

No.	Contact Name	Call Type	Call ID	Call Receive Tone
1	Local	Group Call	2	No
2	PNW 2	Group Call	103187	No
3	MtWest1	Group Call	31063	No
4	WA 2	Group Call	103153	No
5	LOCAL1	Group Call	3181	No
6	LOCAL2	Group Call	3166	No
7	DCI1	Group Call	3160	No
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11	MOUNTAIN	Group Call	3177	No
12	NORTH AMERICA	Group Call	3	No
13	WORLD1	Group Call	1	No
14	WORLD ENGLISH	Group Call	13	No
15	ENGLISH 1	Group Call	113	No
16	204 Nederland	Group Call	204	No
17	FRENCH WORLD	Group Call	4	No

Management Tools

# Adding contacts

- We will add the following contacts to a “virgin” code plug:
  - Talk Groups: Local, Ref TG9, PAPA, SoCal, SoCal1, Cal 3106, CA 1, Zone6, Bridge, NoAmer, World, TAC310, SNARS, Parrot and Direct 99.
  - Private Calls for: WD6FZA, KC6N, W6SS, WA6YVX
- This will allow us to create Channels, as well as Scan and Zone Lists

# Contacts (group/private Calls):

MD380 - KC6N\_MD380\_SN56098\_Virgin.rdt

File Edit Program Setting View Window Help

MD380

- Basic Information
- General Setting
- Menu Item
- Buttons Definitions
- Text Message
- Privacy Setting
- Digit Emergency System
- Digital Contacts**
- Digital RX Group Lists
- Zone Information
- Scan List
- Channels Information
- DTMF Signaling

Digital Contacts

No.	Contact Name	Call Type	Call ID	Call Receive Tone
1	Contact1	Group Call	1	No

1. Double Click "Digital Contacts" to open the Contact Maintenance Dialogue

2. Click "Add" 14 times to make room for the 15 talk Groups

Add Delete

# Populate the Group Call List:

1. Your list should now look like this
2. Fill in “Contact Name”, “Call Type” and “Call ID” columns.

The screenshot shows the MD380 software interface. On the left is a tree view with categories like Basic Information, General Setting, Menu Item, Buttons Definitions, Text Message, Privacy Setting, Digit Emergency System, Digital Contacts, Digital RX Group Lists, Zone Information, Scan List, Channels Information, and DTMF Signaling. The main window displays a table titled 'Digital Contacts' with the following data:

No.	Contact Name	Call Type	Call ID	Call Receive Tone
1	Contact1	Group Call	1	No
2	Contact2	Group Call	2	No
3	Contact3	Group Call	3	No
4	Contact4	Group Call	4	No
5	Contact5	Group Call	5	No
6	Contact6	Group Call	6	No
7	Contact7	Group Call	7	No
8	Contact8	Group Call	8	No
9	Contact9	Group Call	9	No
10	Contact10	Group Call	10	No
11	Contact11	Group Call	11	No
12	Contact12	Group Call	12	No
13	Contact13	Group Call	13	No
14	Contact14	Group Call	14	No
15	Contact15	Group Call	15	No

At the bottom of the window are 'Add' and 'Delete' buttons. Red arrows from the instructions point to the 'Contact Name', 'Call Type', and 'Call ID' columns in the table.

# PAPA Group Lineup

- The TG Setup for the PAPA network is shown in the table below:

PAPA DMR Talkgroup / Timeslot Matrix

Time Slot 1	Time Slot 2
California TG 3106	PAPA TG 97272
California-1 TG 31061	SoCal TG 31066
Call Zone 6 TG 31096	SoCal 1 TG 31067
North America TG 93	Local TG 2
Worldwide TG 91	<b>Reflectors</b> TG 9 Unlink 4000 Link 4xxx Status 5000
TAC 310 TG 310	Static
Nationwide TG 3100	Dynamic
Static	
Dynamic	

Use Slot 1 for connecting to other BrandMeister talkgroups

The talk group ID for SNARS is 31268

# Final Populated Group Call List:

The screenshot shows the MD380 software interface. The main window title is 'MD380 - KC6N\_MD380\_SN56098\_Virgin\_3a.rdt'. The menu bar includes 'File', 'Edit', 'Program', 'Setting', 'View', 'Window', and 'Help'. The left sidebar shows a tree view with 'MD380' expanded, listing various settings like 'Basic Information', 'General Setting', 'Menu Item', 'Buttons Definitions', 'Text Message', 'Privacy Setting', 'Digit Emergency System', 'Digital Contacts', 'Digital RX Group Lists', 'Zone Information', 'Scan List', 'Channels Information', and 'DTMF Signaling'. The 'Digital Contacts' window is open, displaying a table with 15 rows. The table has columns for 'No.', 'Contact Name', 'Call Type', 'Call ID', and 'Call Receive Tone'. Below the table are 'Add' and 'Delete' buttons.

No.	Contact Name	Call Type	Call ID	Call Receive Tone
1	Local	Group Call	2	No
2	BM Ref TG9	Group Call	9	No
3	BM PAPA	Group Call	97272	No
4	BM SoCal	Group Call	31066	No
5	BM SoCal 1	Group Call	31067	No
6	Cal 3106	Group Call	3106	No
7	BM CA 1	Group Call	31061	No
8	BM Zone6	Group Call	31096	No
9	BRIDGE	Group Call	3100	No
10	BM NoAmer	Group Call	93	No
11	BM World	Group Call	91	No
12	TAC 310	Group Call	310	No
13	SNARS	Group Call	31268	No
14	BM Parrot	Private Call	9990	No
15	Direct 99	Group Call	99	No

# Add the Private Call ID's:

1. Add 4 more contacts using the Add button
2. Use the "Call Type" pull-down to make these "private Call Id's"
3. Fill in the Call Sign, Name and DMR ID

The screenshot shows the MD380 software interface with the 'Digital Contacts' window open. The window displays a table of contacts with the following columns: No., Contact Name, Call Type, Call ID, and Call Receive Tone. The last four rows of the table are highlighted with red boxes, indicating the contacts to be added. The 'Add' button at the bottom of the window is also highlighted with a red box.

No.	Contact Name	Call Type	Call ID	Call Receive Tone
4	BM SoCal	Group Call	31066	No
5	BM SoCal 1	Group Call	31067	No
6	Cal 3106	Group Call	3106	No
7	BM CA 1	Group Call	31061	No
8	BM Zone6	Group Call	31096	No
9	BRIDGE	Group Call	3100	No
10	BM NoAmer	Group Call	93	No
11	BM World	Group Call	91	No
12	TAC 310	Group Call	310	No
13	SNARS	Group Call	31268	No
14	BM Parrot	Private Call	9990	No
15	Direct 99	Group Call	99	No
16	Contact1	Group Call	1	No
17	Contact2	Group Call	3	No
18	Contact3	Group Call	4	No
19	Contact4	Group Call	5	No



# Populate the Private Call List:

1. Add the Call Signs, Names and DMR Id's for the 4 private call contacts
2. You are done. Now would be a good time to do a save on your file.

MD380 - KC6N\_MD380\_SN56098\_Virgin\_3a.rdt

File Edit Program Setting View Window Help

MD380

- Basic Information
- General Setting
- Menu Item
- Buttons Definitions
- Text Message
- Privacy Setting
- Digit Emergency System
- Digital Contacts
- Digital RX Group Lists
- Zone Information
- Scan List
- Channels Information
- DTMF Signaling

Digital Contacts

No.	Contact Name	Call Type	Call ID	Call Receive Tone
4	BM SoCal	Group Call	31066	No
5	BM SoCal 1	Group Call	31067	No
6	Cal 3106	Group Call	3106	No
7	BM CA 1	Group Call	31061	No
8	BM Zone6	Group Call	31096	No
9	BRIDGE	Group Call	3100	No
10	BM NoAmer	Group Call	93	No
11	BM World	Group Call	91	No
12	TAC 310	Group Call	310	No
13	SNARS	Group Call	31268	No
14	BM Parrot	Private Call	9990	No
15	Direct 99	Group Call	99	No
16	WD6FZA Cecil	Private Call	3106471	No
17	KC6N Dave	Private Call	3106574	No
18	WA6YVX Ed	Private Call	3106501	No
19	W6SS Vance	Private Call	3106506	No

Add Delete

# MD-380 CodePlug 101

Part IIIb

Code Plug management Concepts  
(Adding Channels)

# Adding Channels

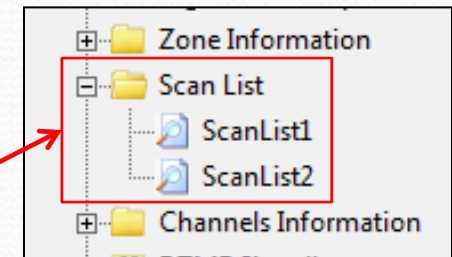
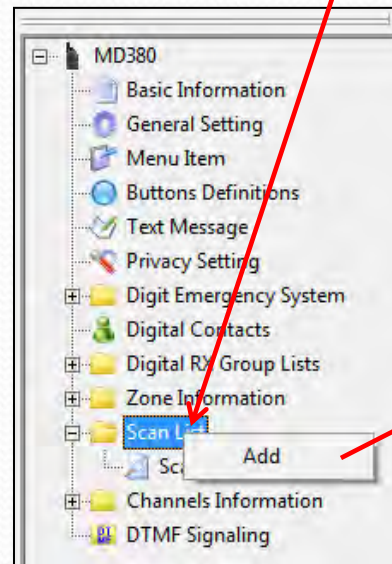
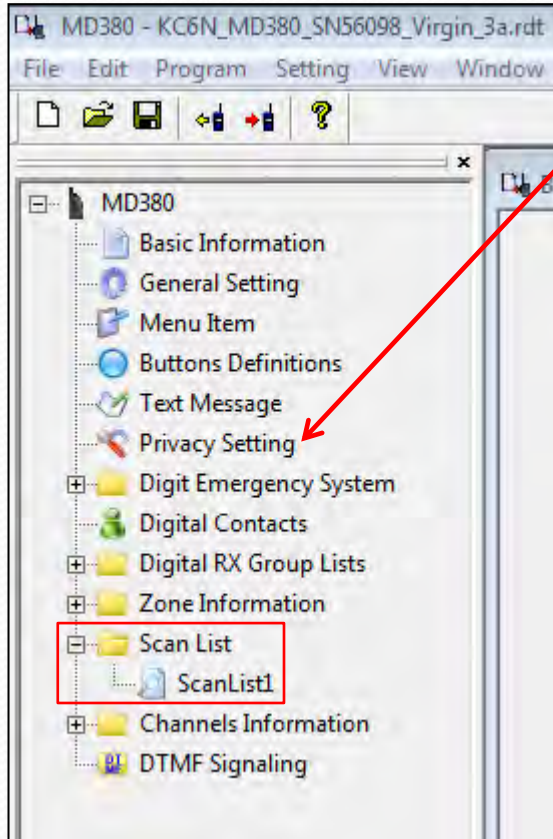
- We did contacts first since we need these for the digital channel definitions
- We do the channels next since they have to be in place in order to define the Zone and to finalize the Scan lists.
- We will create:
  - The PAPA Woodson zone,
  - A Hot Spot zone, and
  - Analog and Simplex Channels

# Scan List Place holders

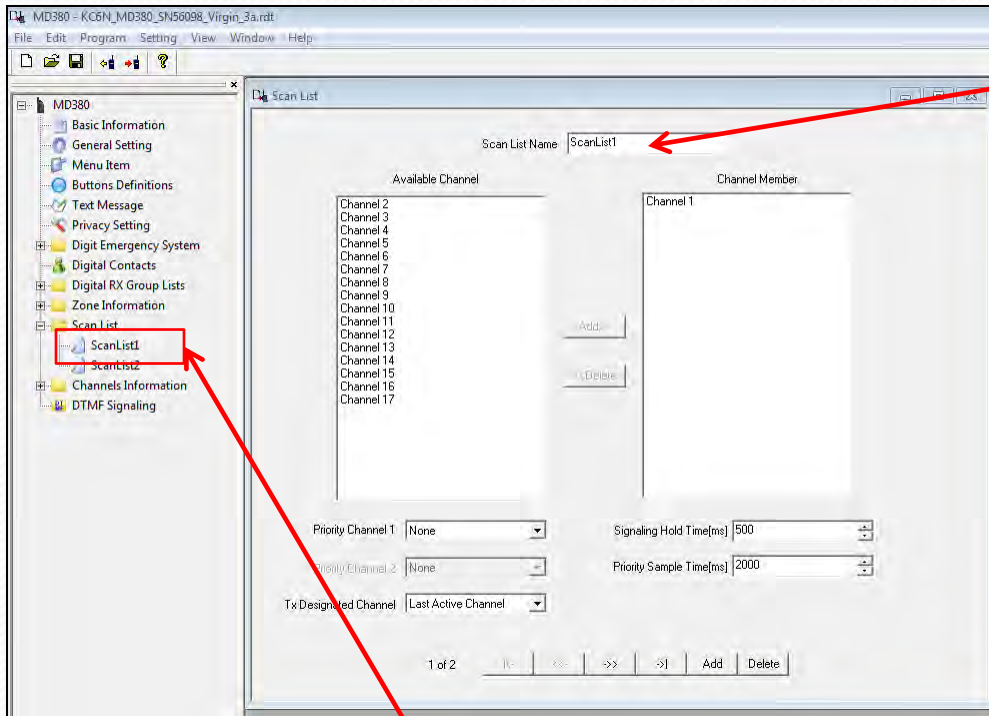
- Before we create the channels, we need to create a placeholder for their scan lists
- We need to reference these in the channel definitions so we need them ahead of time
- We will create the following two scan lists:
  - PAPA Woodson
  - ZumSpot
- We will populate these later

# Create two scan groups

- Create a second Scan List entry by right clicking on “Scan List” and selecting “Add”



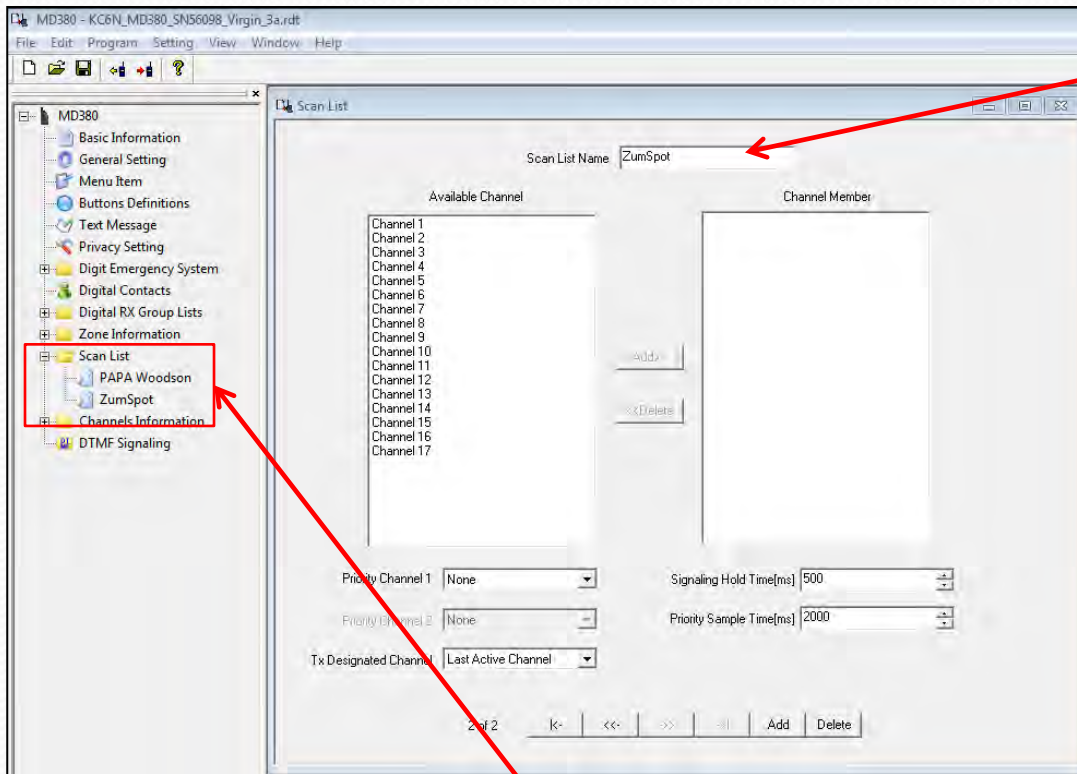
# Create two scan groups



2. Enter the name for the first scan list here.
3. Repeat for the second scan List

1. Click "scan List 1" to open the first scan list.

# Two new Scan Groups



2. ZumSpot scan list (we'll populate it later, once the channels are entered)

1. Scan Groups for PAPA Woodson and the ZumSpot

# Digital Channels

- We now have a dummy scan list for each zone (but haven't populated them yet)
- We will create channels for two Zones
  - PAPA Woodson (448.520 (-) Color Code 1)
  - HotSpot (438.250 (Simplex) Color Code 1)
- We will then proceed to build the Zone lists and populate the Scan lists



# Building PAPA Woodson

- The TG Setup for the PAPA network is shown in the table below:

PAPA DMR Talkgroup / Timeslot Matrix

Time Slot 1	Time Slot 2
California TG 3106	PAPA TG 97272
California-1 TG 31061	SoCal TG 31066
Call Zone 6 TG 31096	SoCal 1 TG 31067
North America TG 93	Local TG 2
Worldwide TG 91	<b>Reflectors</b> TG 9 Unlink 4000 Link 4xxx Status 5000
TAC 310 TG 310	Static
Nationwide TG 3100	Dynamic
Static	
Dynamic	

Use Slot 1 for connecting to other BrandMeister talkgroups

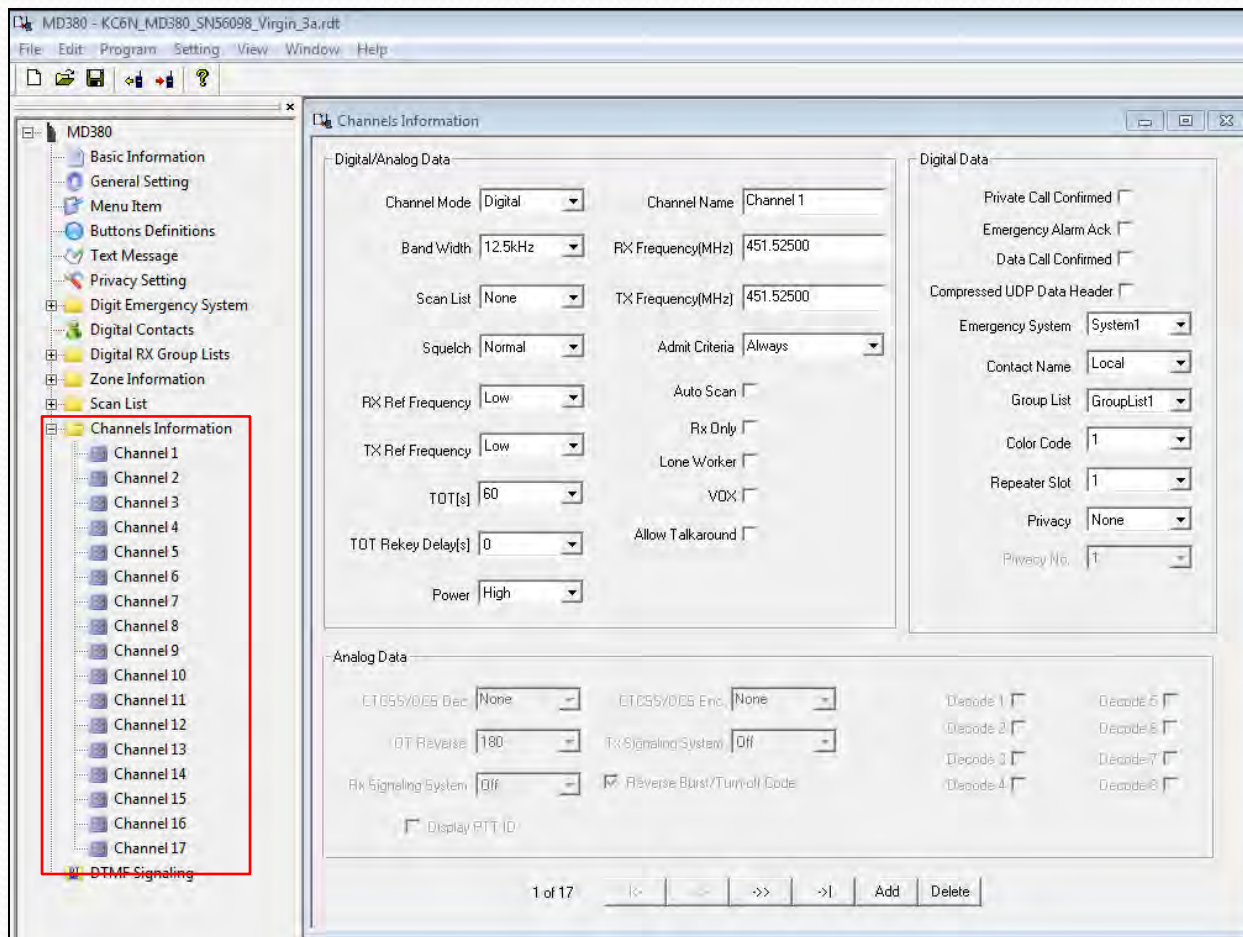
The talk group ID for SNARS is 31268

# Digital Channel Creation

- We are going to create 14 digital channels for the PAPA Woodson Zone as follows:
  - We will make one master channel which will have the pair Frequencies, Color Code, Scan Group, Power level etc.
  - We will then replicate this “template channel” 13 more times
  - We will then edit each of these channels, to add the Name, Time Slot and TG ID

# PAPA Woodson Channels

- The blank channel form is shown below



My “virgin” radio already had 17 talk groups populated.

If yours does not, Right Click “Channel Information”, Click “ADD” and create 17 blank channels.

# PAPA Woodson Channels

- Build a template for the Woodson group

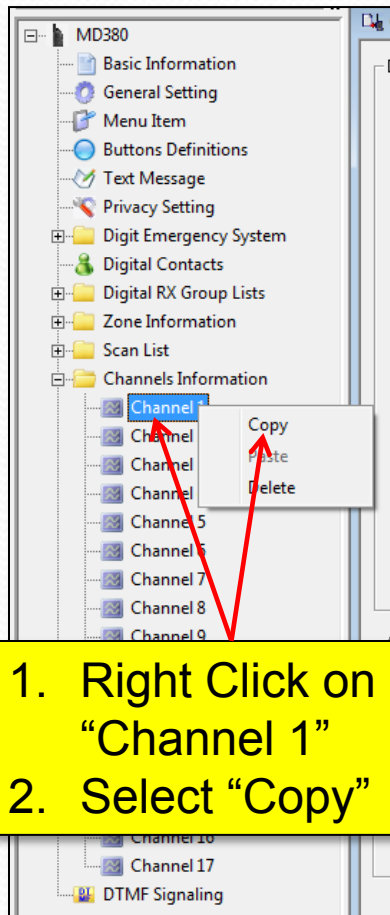
The screenshot shows the MD380 software interface with the 'Channels Information' window open. The left sidebar shows a tree view of channels, with 'Channel 1' selected and highlighted in red. The main window displays the configuration for 'Channel 1'. The 'Digital/Analog Data' section includes: Channel Mode (Digital), Channel Name (Channel 1), Band Width (12.5kHz), RX Frequency (458.52000), TX Frequency (443.52000), Scan List (PAPA Wood), Squelch (Normal), Admit Criteria (Color Code), RX Ref Frequency (Low), TX Ref Frequency (Low), TDT (180), TDT Rekey Delay (0), and Power (High). The 'Digital Data' section includes: Private Call Confirmed, Emergency Alarm Ack, Data Call Confirmed, Compressed UDP Data Header, Emergency System (None), Contact Name (Local), Group List (None), Color Code (1), Repeater Slot (1), Privacy (None), and Privacy No. (1). The 'DTMF Signaling' section includes: DCS Enc (None), DCS System (Off), and DCS Burst/Turnoff Code. The bottom of the window shows navigation buttons: 1 of 17, <-, >-, >>, >|, Add, and Delete.

1. Click on "Channel 1" to get the form for Channel 1

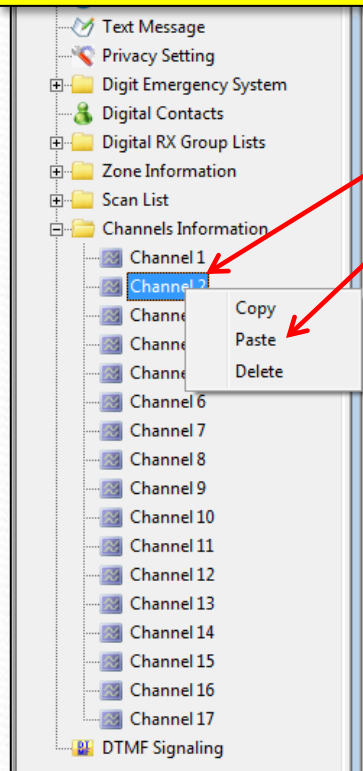
2. Edit the page as shown:
- Color code = 1
  - Scan List=PAPA WUD
  - RX = 448.520
  - TX = 443.520
  - Power Level = High
  - TX Admit=Color Code
  - Time Out=180 sec
  - Parameters should match here

# PAPA Woodson Channels

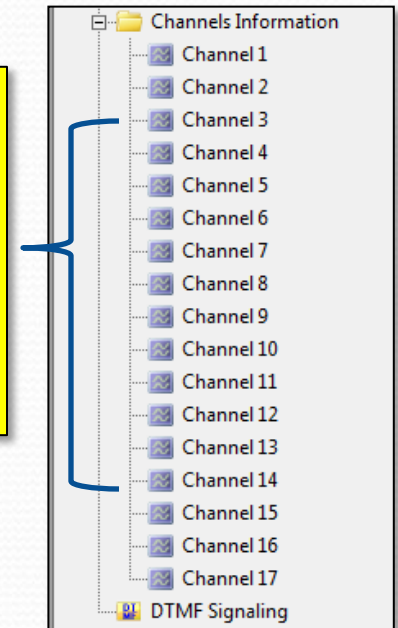
- Add Placeholders for the 14 channels



3. Right Click on "Channel 2"
4. Click "Paste" to paste a copy of the Channel 1 template

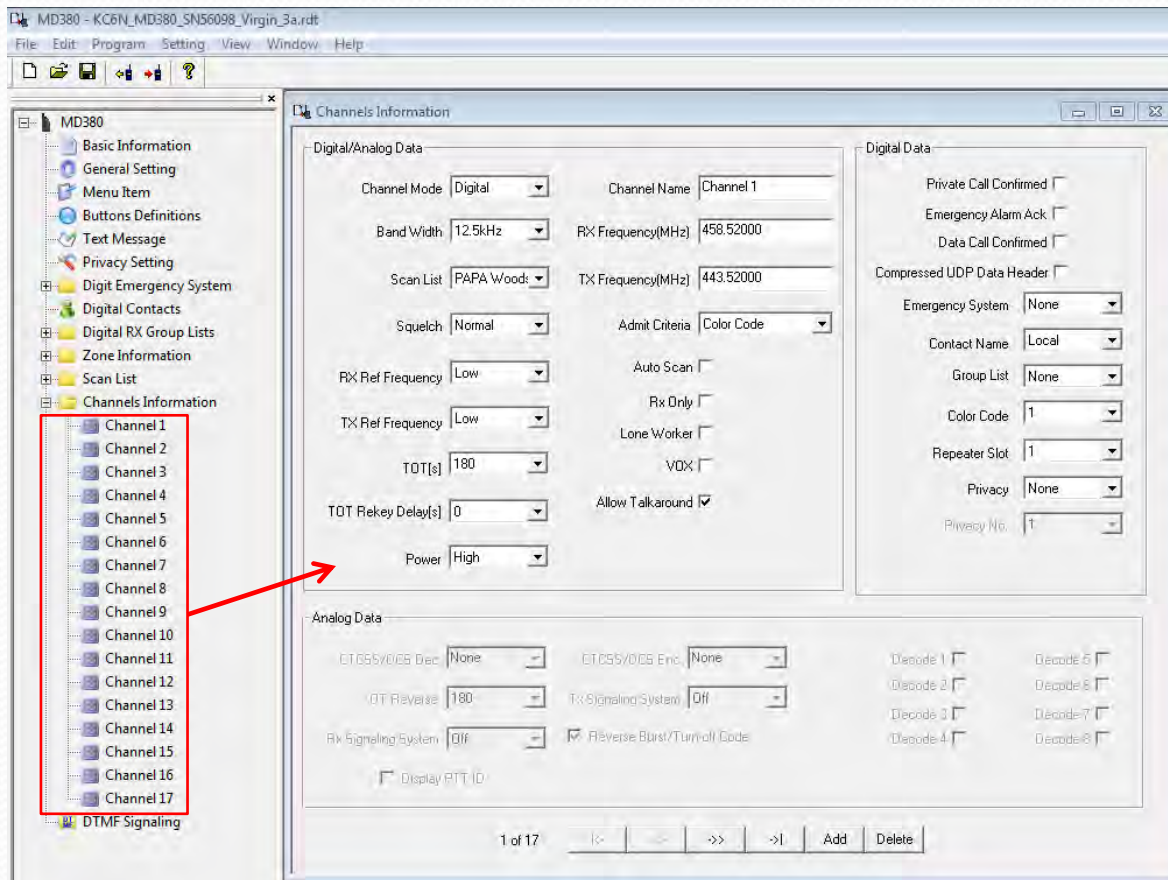


Repeat:  
Click, paste  
Click, paste  
Click, Paste  
...  
up to Ch 14



# PAPA Woodson Channels

- Confirm that all 14 entries are as below:

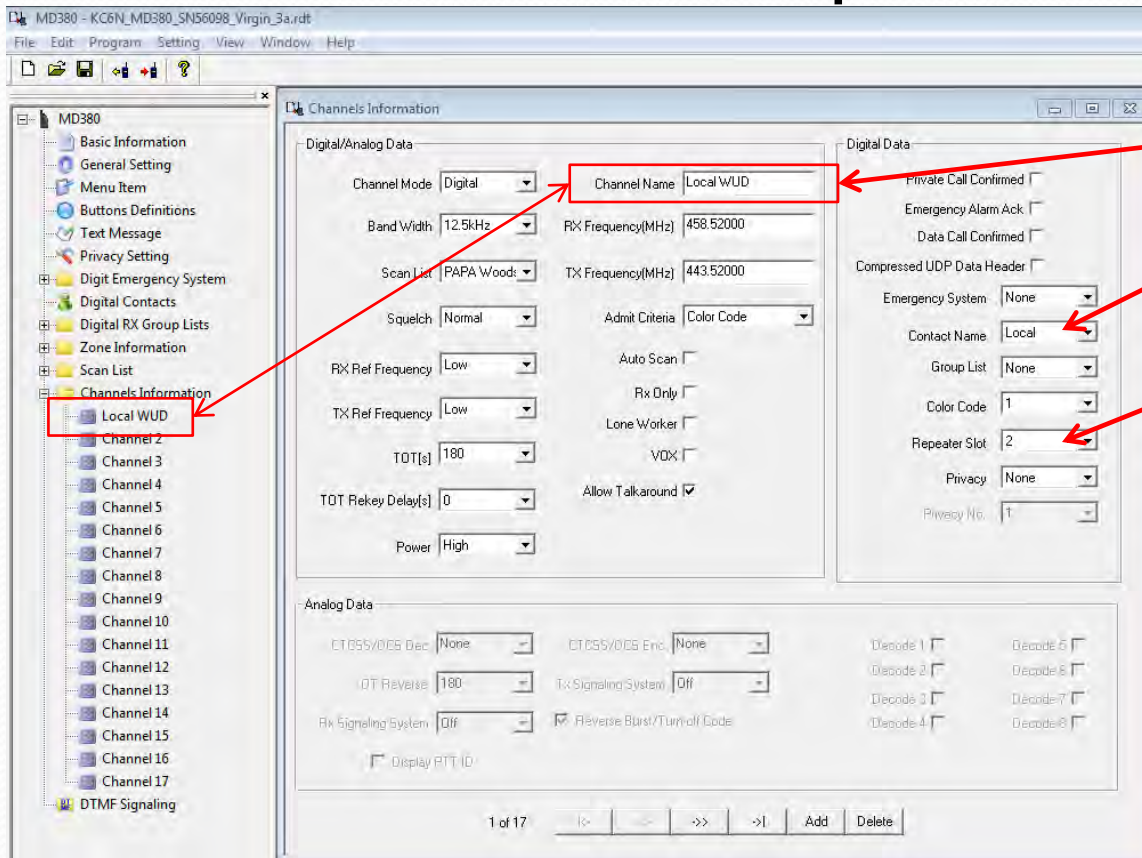


Check all entries:

- Color code = "1"
- Scan List="PAPA Woodson"
- RX = "448.520"
- TX = "443.520"
- Power "Level = High"
- TX Admit = "Color Code Free"
- Time Out = "180"
- **Fix any errors**

# PAPA Woodson Channels

- Now we need to enter the Name, Time Slot and Talk Group for each channel:



**Make Woodson Local:**

- Set Channel Name = "Local WUD"
- Set Tx Contact = "Local"
- Set Repeater/Time slot = "Slot 2"

# Enter remaining channels

- Repeat the pervious procedure for each of the channels listed below:

Edit the Channel Alias, Time Slot and Tx Group entries for Ch 3 – Ch 14 to match the adjacent table. To conserve radio display space use the abbreviation WUD for Woodson.

PAPA DMR Talkgroup / Timeslot Matrix

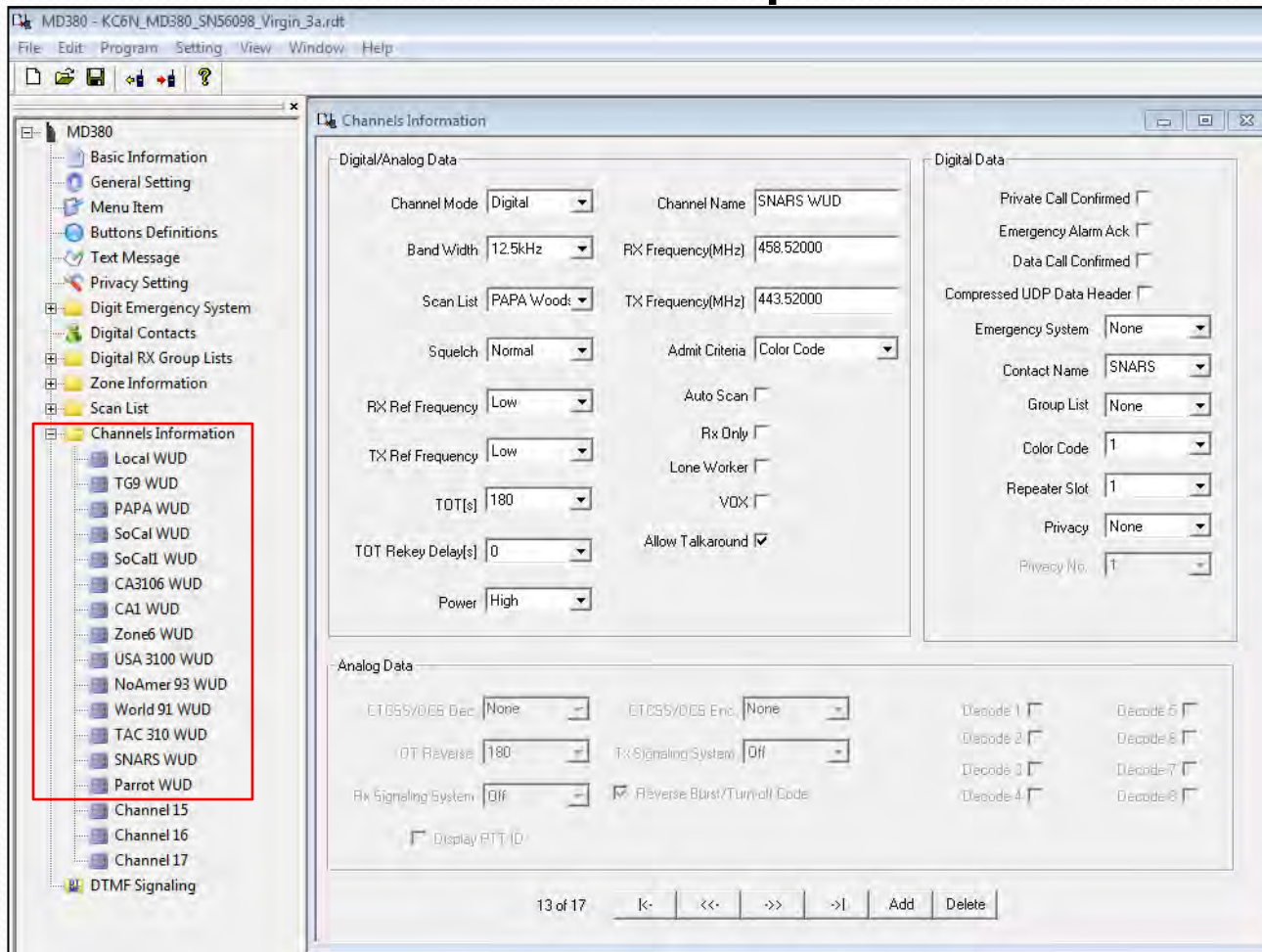
Time Slot 1	Time Slot 2
California TG 3106	PAPA TG 97272
California-1 TG 31081	SoCal TG 31066
Call Zone 6 TG 31096	SoCal 1 TG 31067
North America TG 93	Local TG 2
Worldwide TG 91	Reflectors TG 9 Unlink 4000 Link 4xxx Status 5000
TAC 310 TG 310	Static
Nationwide TG 3100	Dynamic
Static	
Dynamic	

Use Slot 1 for connecting to other BrandMeister talkgroups



# Enter remaining channels

- Your Channel map should look like this:

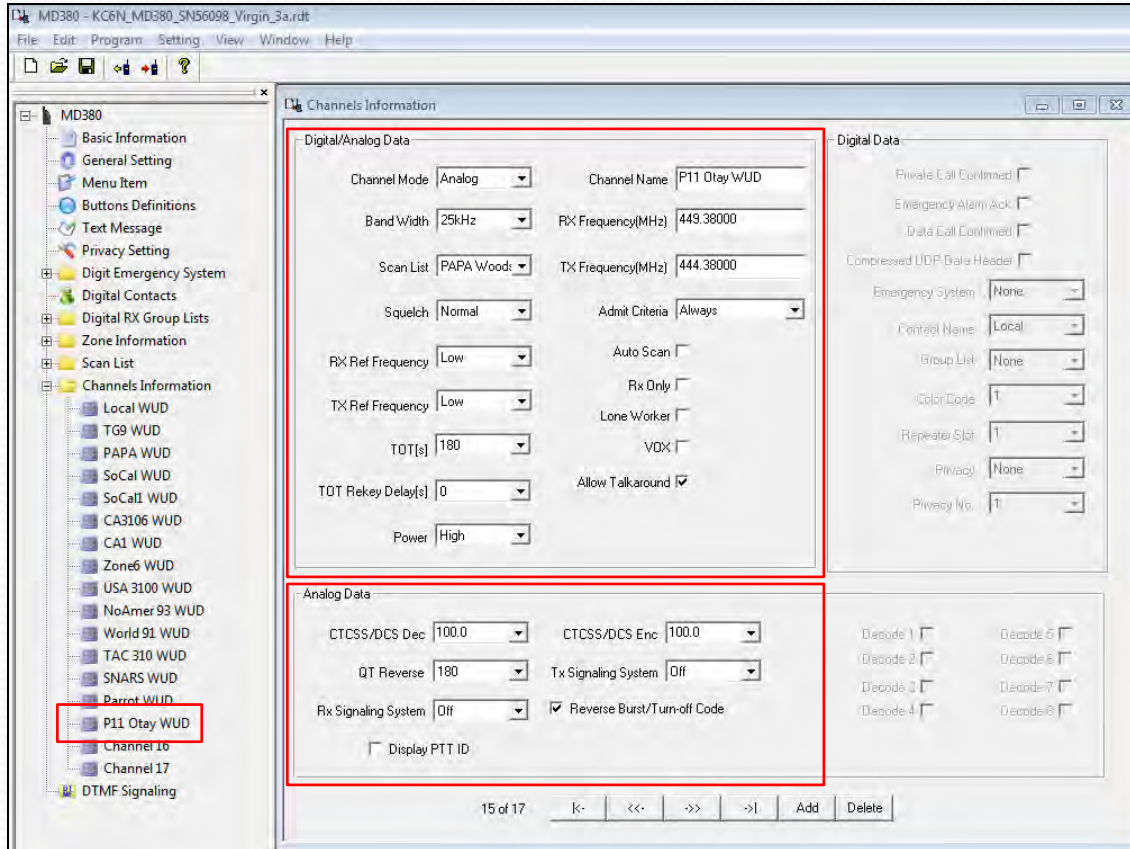


Double check all the channels. Name, TS, TG should be correct.

Save your file

# Adding an Analog Channel

- We'll create PAPA Otay (P11) as an example

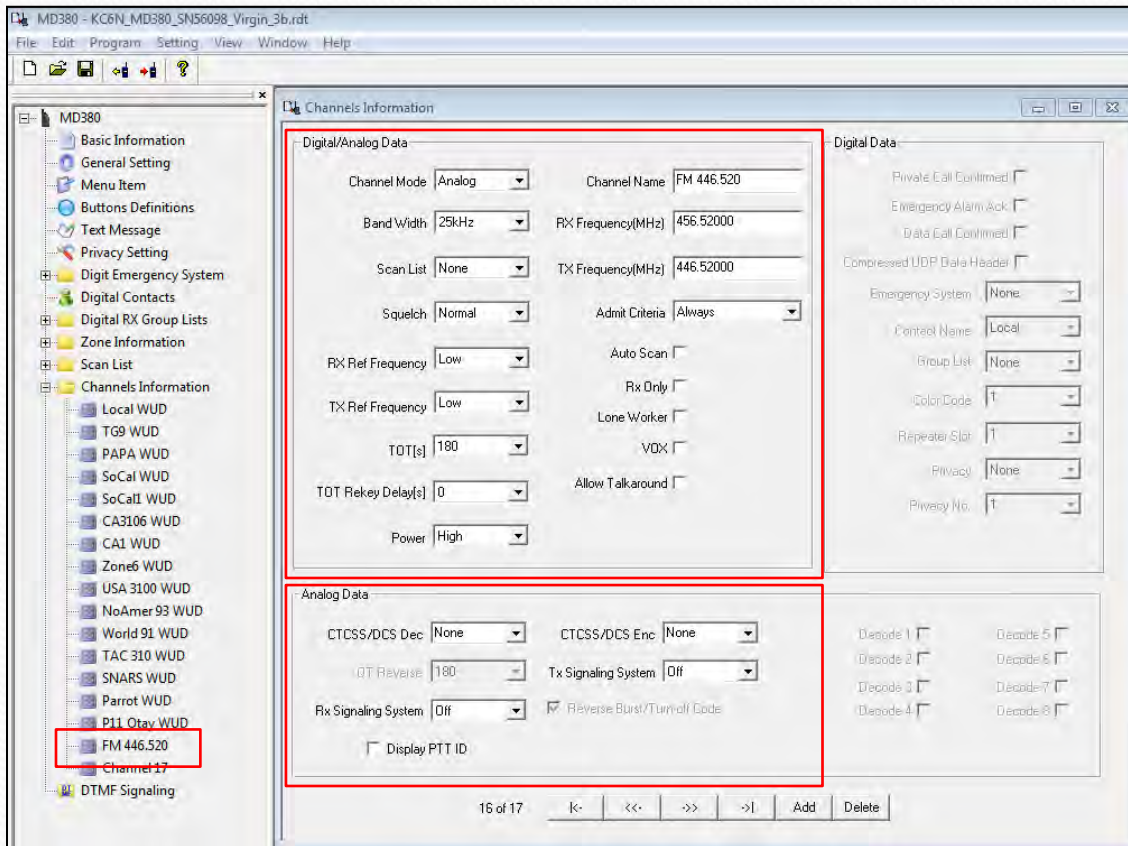


Make PAPA Otay (P11):

- Set CH Alias = “P11 Otay WD”
- Set Channel Bandwidth = “25”
- Enable “Talk Around”
- Set “Scan List” to “PAPA Woodson”
- Set RX Freq=449.38
- Set TX Freq=444.38
- Enable CTCSS @ 100 Hz
- Power=High
- Admit = Always Allow
- Blab-Off=180 seconds

# Analog Simplex Channel

- We'll create analog simplex 446.520

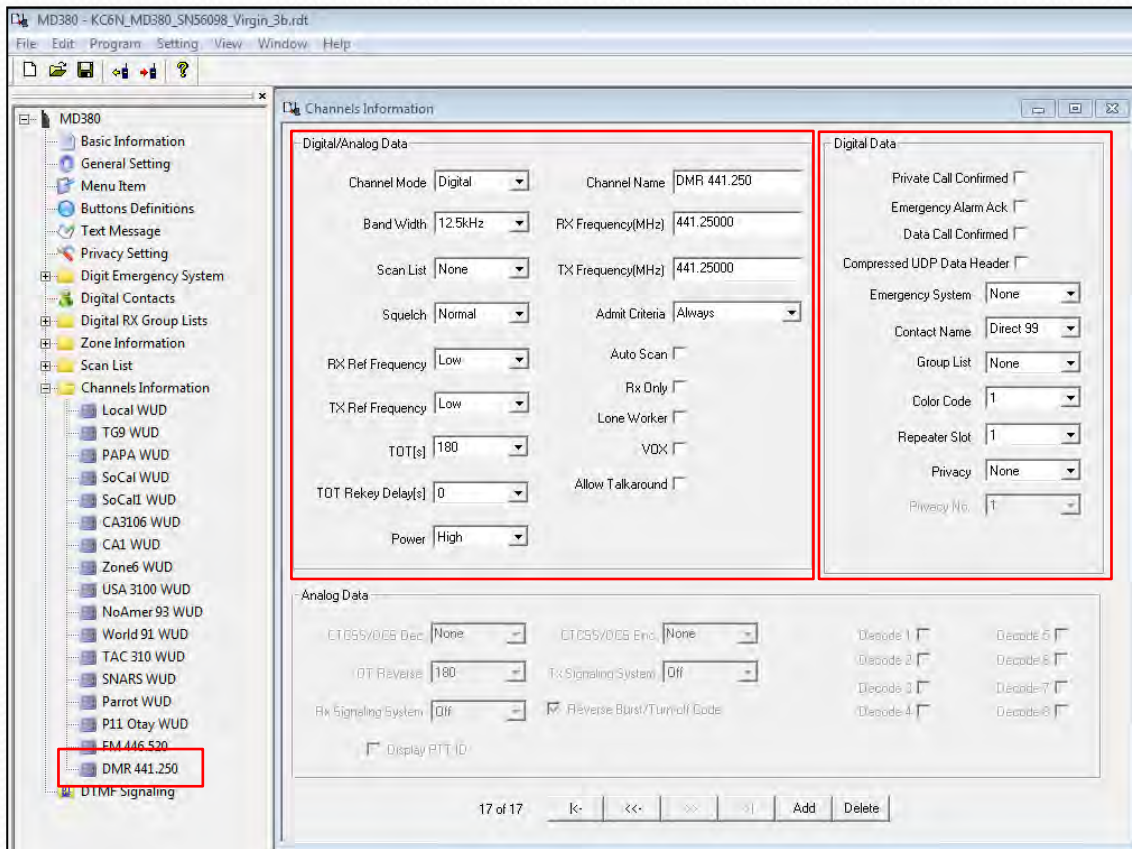


Make Simplex 446.520:

- Set CH Alias = "FM 446.520"
- Set Channel Bandwidth = "25"
- Disable "Talk Around"
- Set "Scan List" to "None"
- Set RX Freq=446.52
- Set TX Freq=446.52
- Enable CTCSS=None
- Power=High
- Admit = Always Allow
- Blab-Off=180 seconds

# Digital Simplex Channel

- We'll create digital simplex 441.125



Make Simplex DMR Ch

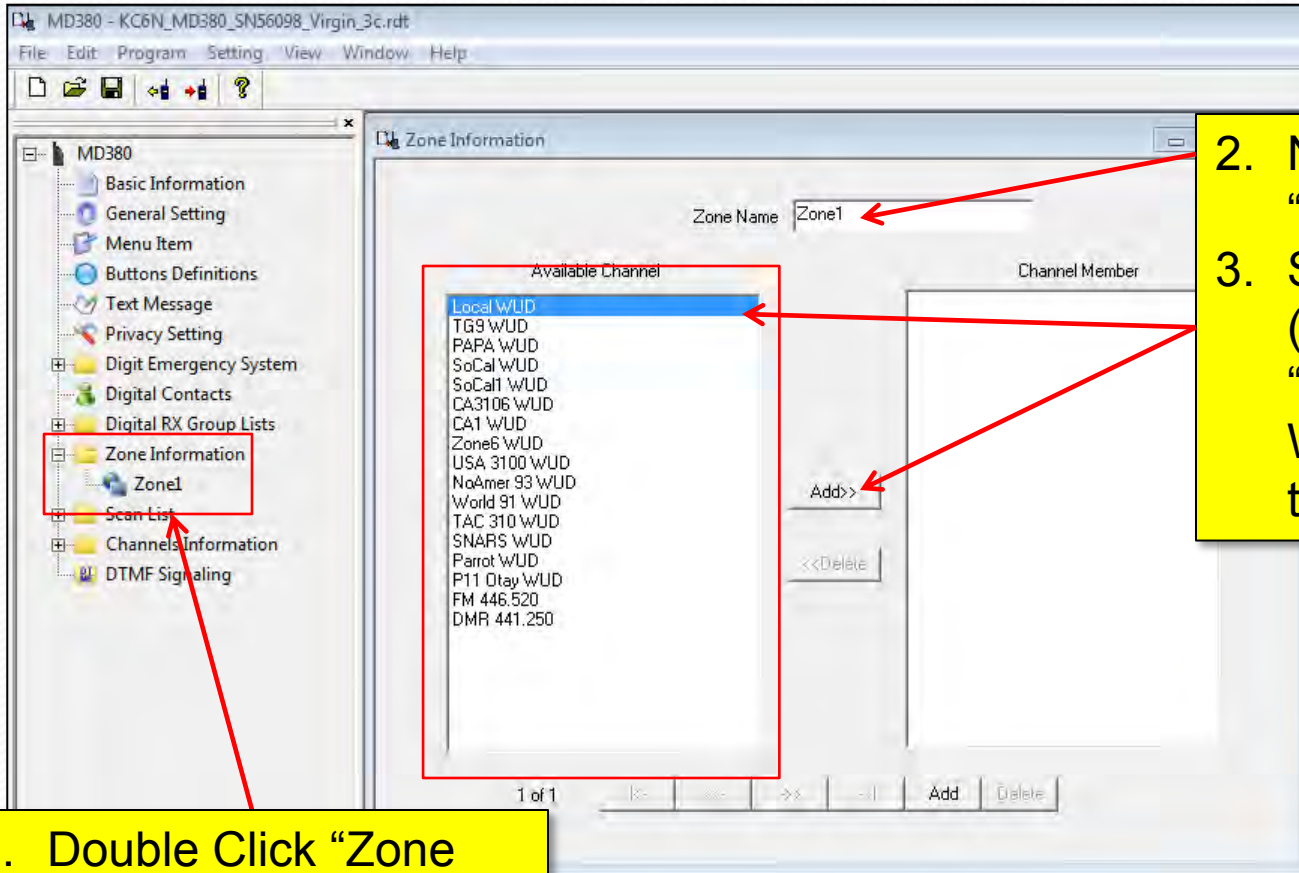
- Set CH Alias = "DMR 441.250"
- Set Channel Bandwidth = "12.5"
- Disable "Talk Around"
- Set "Scan List" to "None"
- Set RX Freq=441.125
- Set Contact to "Direct 99" (you will need to add group call Direct 99, ID=99)
- Power=High
- Admit = Always Allow
- Blab-Off=180 seconds

# MD-380 CodePlug 101

Part IIIc

Code Plug management Concepts  
(Populate the zone and scan lists)

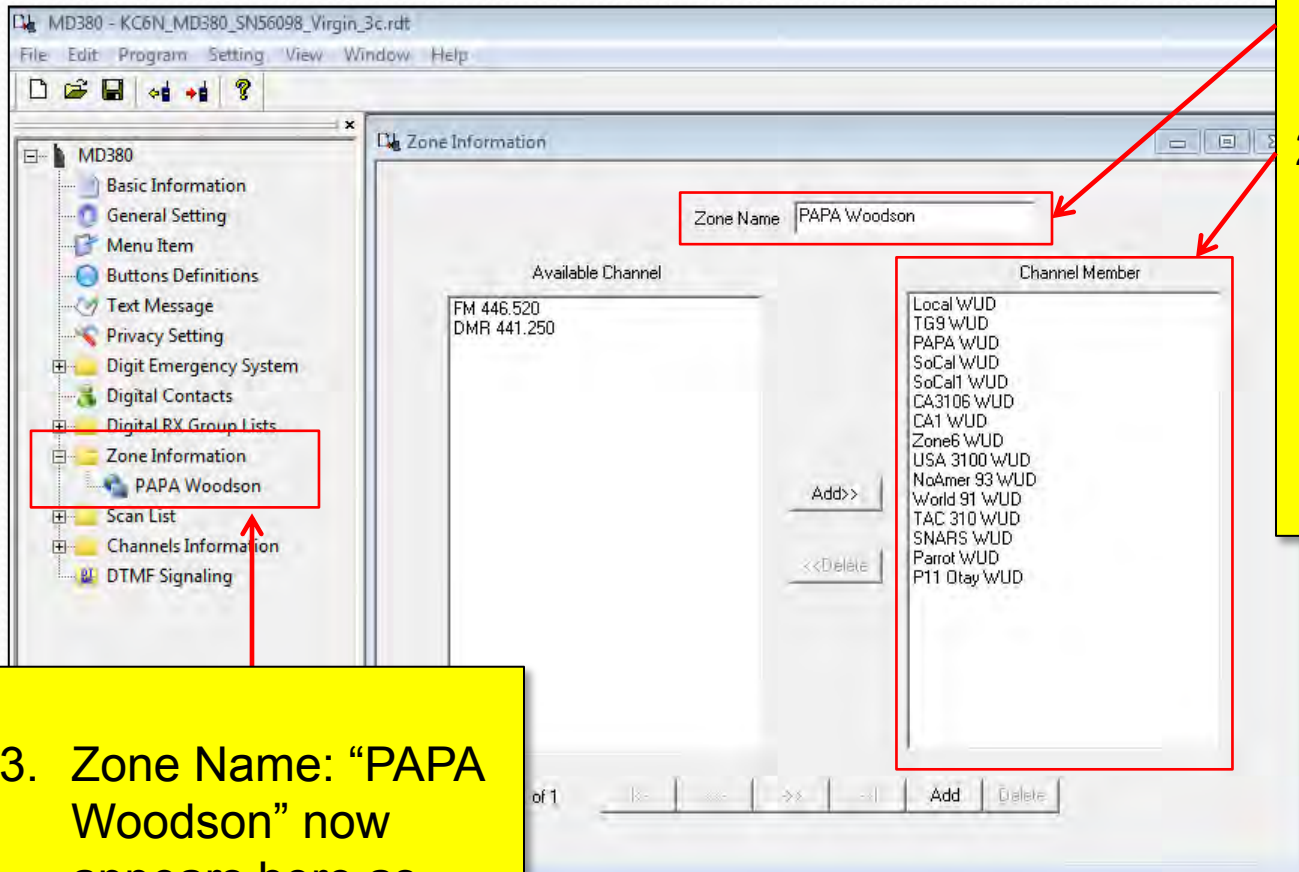
# Create Woodson Zone



2. Name your Zone "PAPA Woodson"
3. Select each channel (one by one) and "Add" it to the Woodson Zone using the "Add" button

1. Double Click "Zone Information" and Click "Zone1".

# Final Woodson Zone



1. Enter Zone name: "PAPA Woodson"
2. Channel Members are now here. Make sure you enter them in the order you want on your channel switch for this zone.

3. Zone Name: "PAPA Woodson" now appears here as well

# Create Woodson Scan List

MD380 - KC6N\_MD380\_SN56098\_Virgin\_3c.rdt

File Edit Program Setting View Window Help

MD380

- Basic Information
- General Setting
- Menu Item
- Buttons Definitions
- Text Message
- Privacy Setting
- Digit Emergency System
- Digital Contacts
- Digital RX Group Lists
- Zone Information
- Scan List
  - PAPA Woodson
  - ZumSpot
- Channels Information
- DTMF Signaling

Scan List Name: PAPA Woodson

Available Channel

- Local WUD
- TG9 WUD
- PAPA WUD
- SoCal WUD
- SoCal1 WUD
- CA3105 WUD
- CA1 WUD
- Zone6 WUD
- USA 3100 WUD
- NoAmer 93 WUD
- World 91 WUD
- TAC 310 WUD
- SNARS WUD
- Parrot WUD
- P11 Otay WUD
- FM 446.520
- DMR 441.250

Channel Member

Add>

<<Delete

Priority Channel 1: [Dropdown]

Priority Channel 2: [Dropdown]

Signaled Channel: Last Active Channel [Dropdown]

Signaling Hold Time[ms]: 500 [Spinner]

Priority Sample Time[ms]: 2000 [Spinner]

1 of 2 [Navigation Buttons] Add Delete

2. Select the channels (Ctrl Click) you want to scan and “Add” them to the Woodson Scan List using the “Add” button. The order is not important in this case.

1. Double Click “Scan List”, click “PAPA Woodson” to open the Scan List dialogue.



# Final Woodson Scan List

The screenshot shows the MD380 software interface with the 'Scan List' configuration window open. The 'Scan List Name' is set to 'PAPA Woodson'. The 'Available Channel' list includes: SoCal1 WUD, CA1 WUD, USA 3100 WUD, NoAmer 93 WUD, World 91 WUD, TAC 310 WUD, SNARS WUD, Parrot WUD (highlighted), P11 Otay WUD, FM 446.520, and DMR 441.250. The 'Channel Member' list includes: Local WUD, TG9 WUD, PAPA WUD, SoCal WUD, CA3106 WUD, and Zone6 WUD. The 'Scan List' folder in the left sidebar is highlighted with a red box. The 'Scan List Name' field is also highlighted with a red box. The 'Channel Member' list is highlighted with a red box. The 'Add' and 'Delete' buttons are visible between the two lists. The 'Priority Channel 1' and 'Priority Channel 2' dropdowns are set to empty. The 'Signaling Hold Time[ms]' is set to 500 and the 'Priority Sample Time[ms]' is set to 2000. The 'Last Active Channel' dropdown is set to empty. The bottom of the window shows '1 of 2' and navigation buttons for 'Add' and 'Delete'.

1. Scan List name: "PAPA Woodson"
2. Scan Group members here. Note that the order is not important for scan.

3. Scan List Name: "PAPA Woodson" here

# MD-380 CodePlug 101

Part IIIId

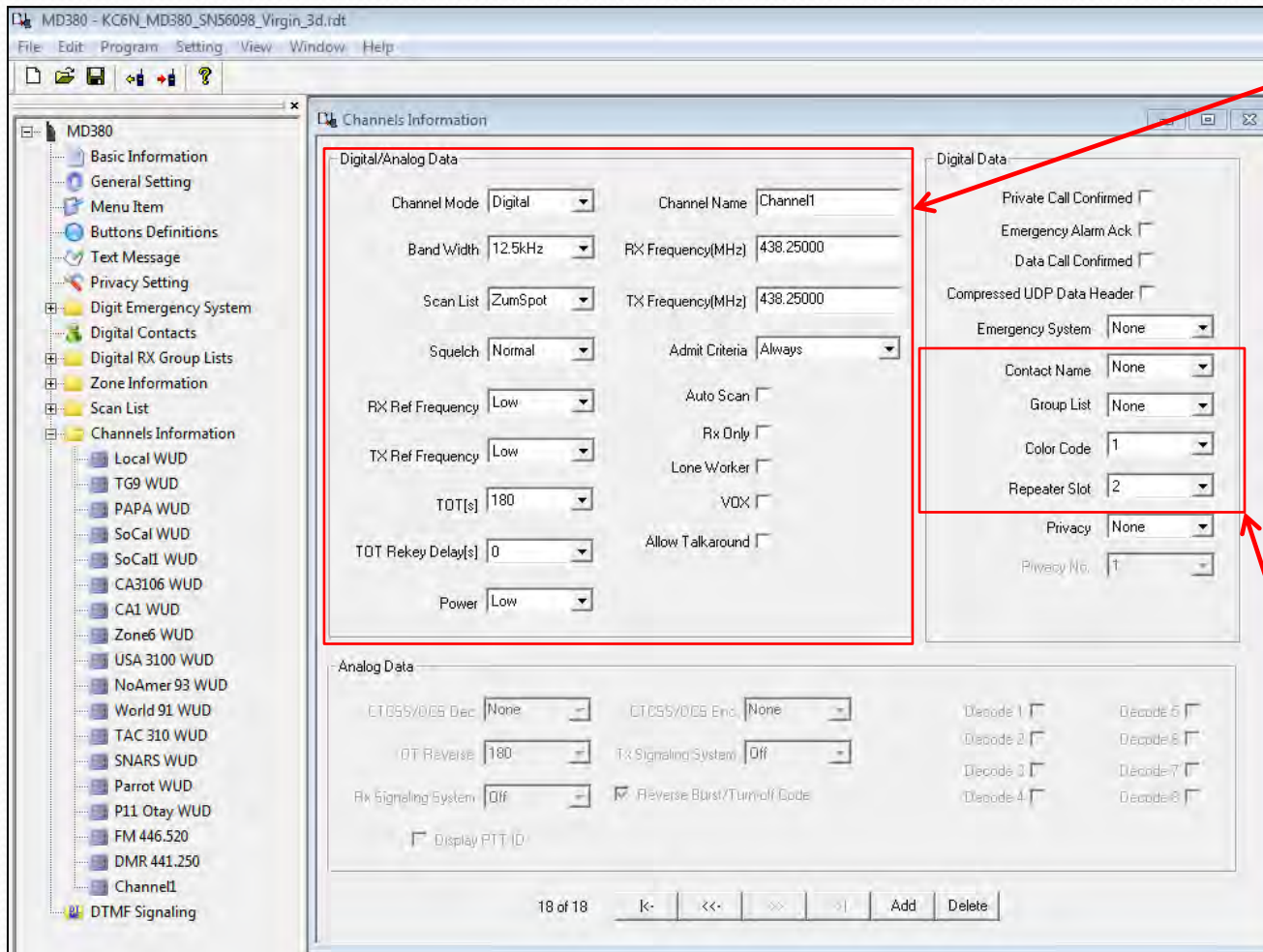
Code Plug management Concepts

(Overview: Adding a hotspot zone)

# Creating a HotSpot Zone

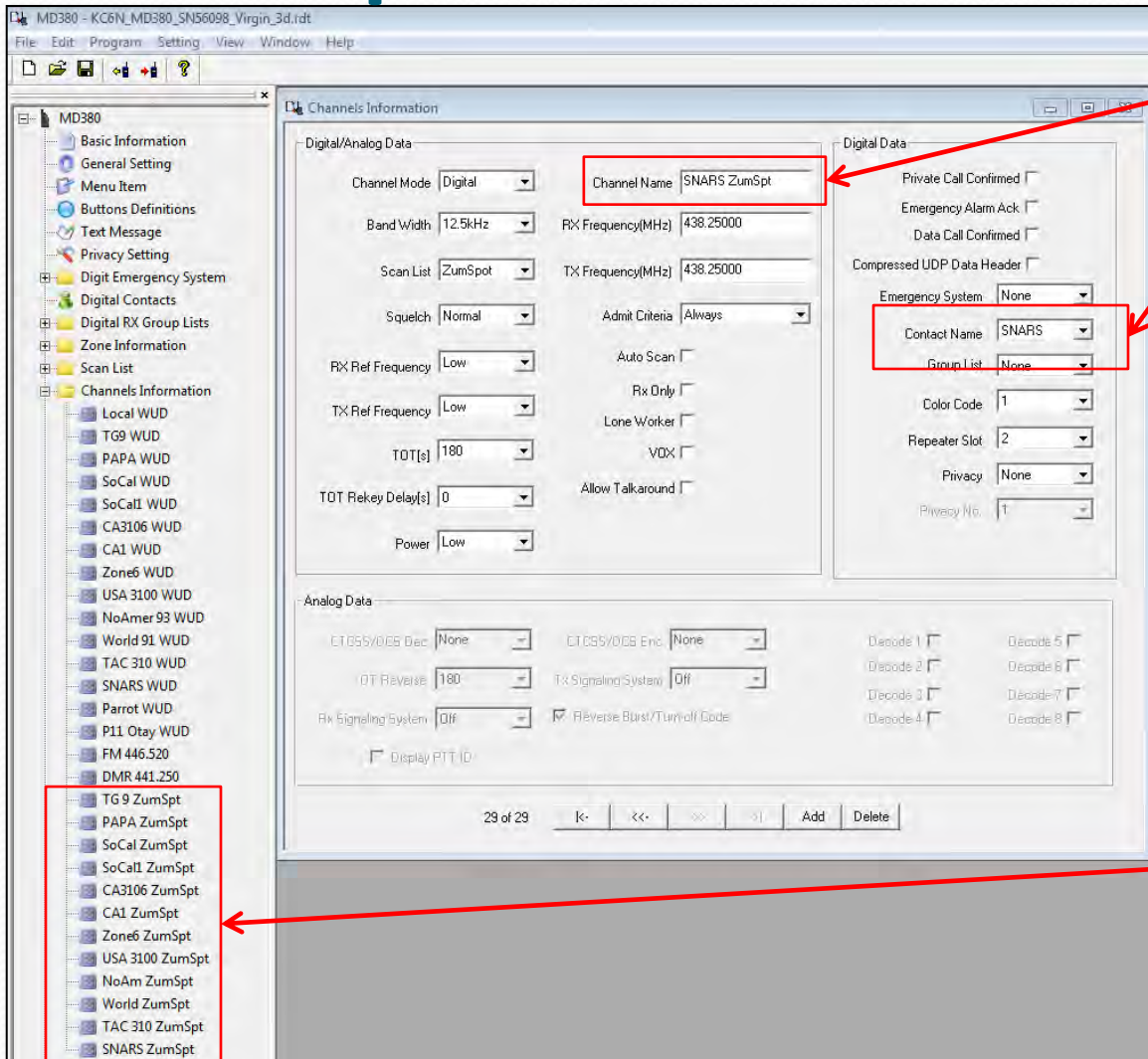
- The steps to create a HotSpot zone are the same as for any other zone except:
  - The TX and RX Frequencies are the same.
  - The CC is 1 and the Time slot is “2”
  - You don’t program “Local”
  - You may not want to program “PAPA”
  - You can scan your hot spot zone and have analogs if you like.
- We’ll just show the completed screens

# HotSpot CH Template



1. Set up a digital channel
2. Set Scan List to “ZumSpot”
3. TX Timeout=180
4. Power=Low
5. RX and TX Freq to your choice (I chose 438.250)
6. Admit=CC Free
7. Un-check “Talkaround”
8. Set CC=1
9. Set TS=1
10. Replicate this as before.

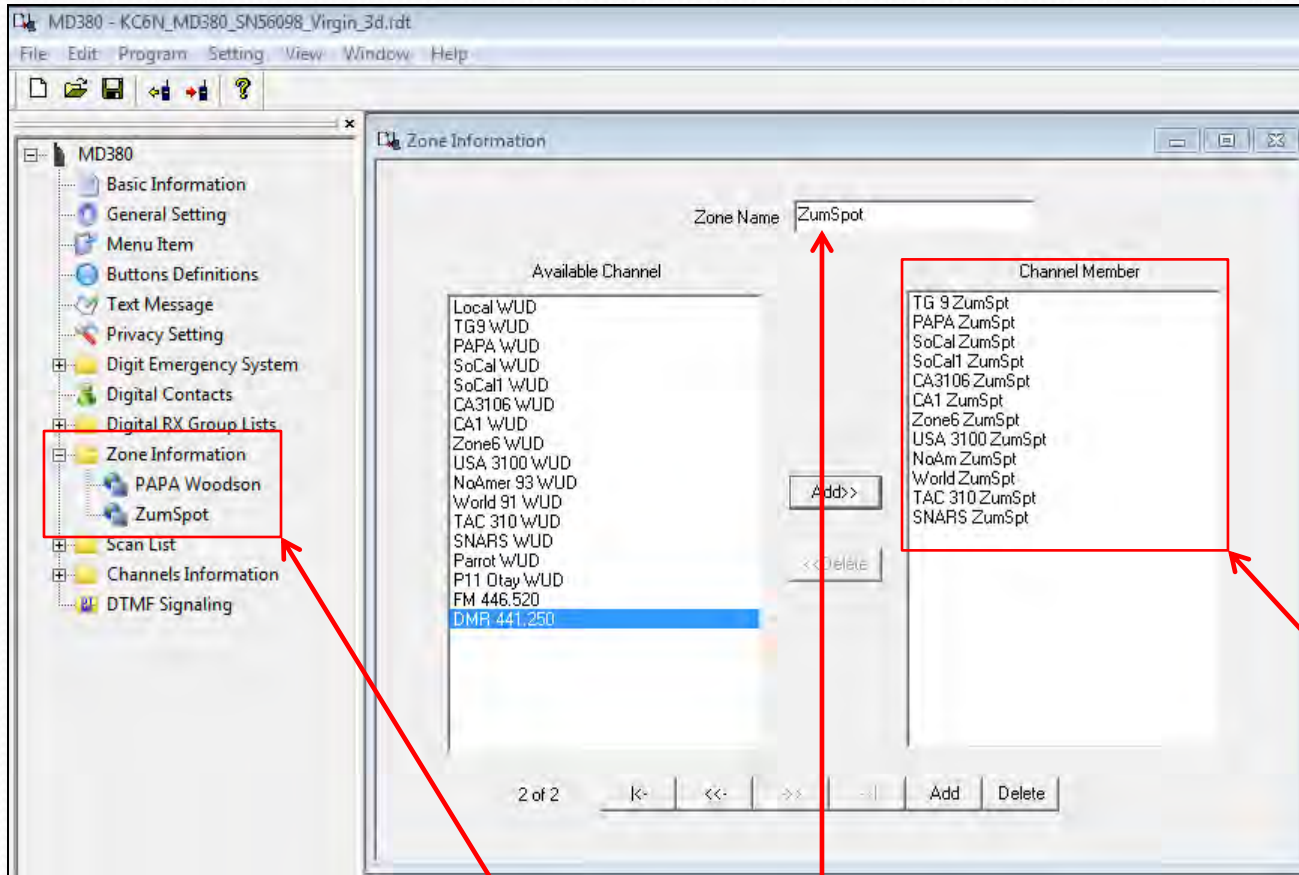
# HotSpot SNARS Channel



1. Edit Name: "HS SNARS"
2. Edit TX Contact to: "SNARS"

3. Repeat for all 12 channels with correct name and TG ID

# HotSpot Zone List

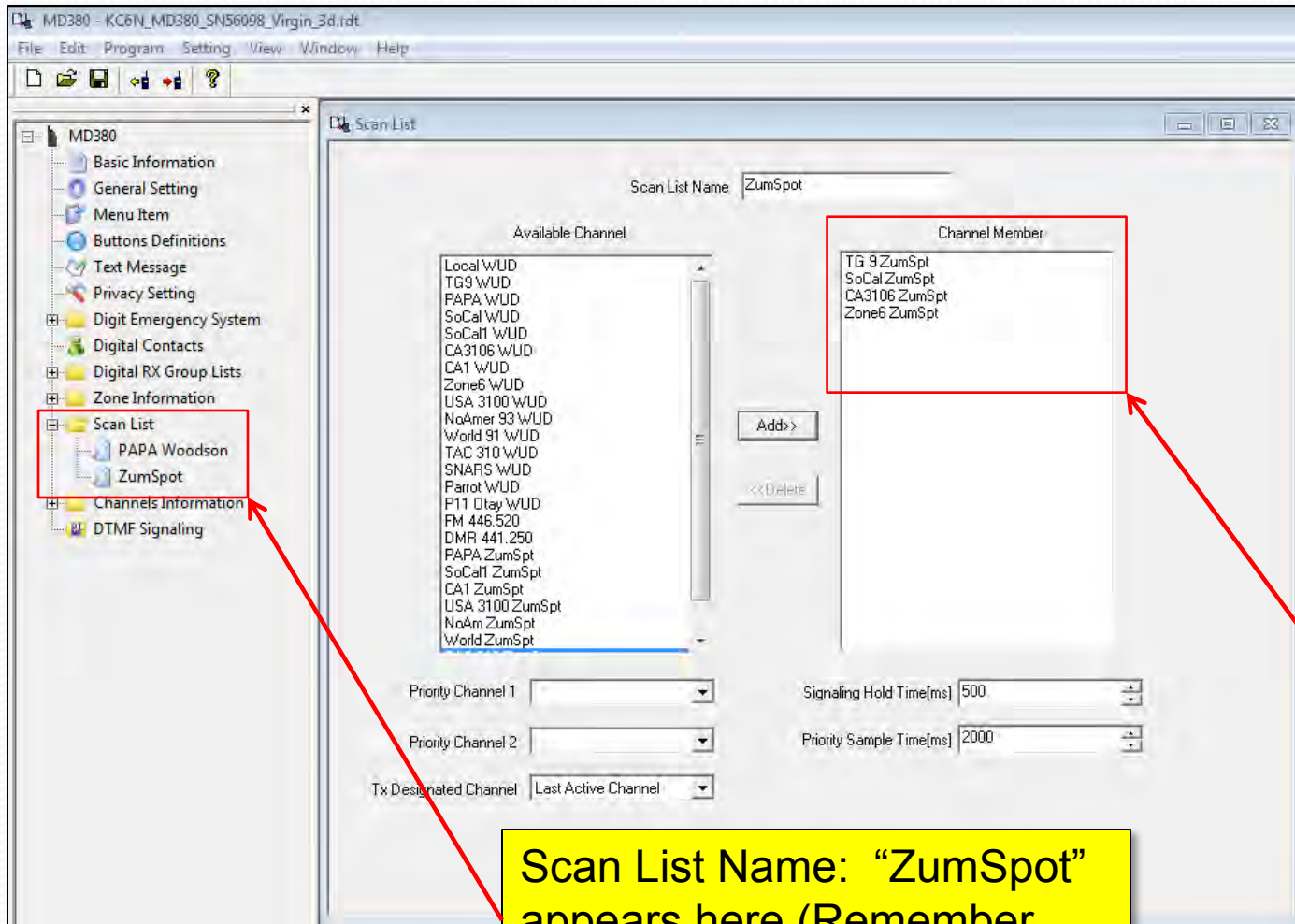


Create and populate a zone for your ZumSpot the same way we did for the woodson zone. Make sure you list them in the order you want them to appear on your channel switch.

Populated Zone List

Zone Name: "ZumSpot" appears here

# HotSpot Scan List



Populate the scan list as previously shown. Order isn't important. I usually scan static TG's only.

Populated Scan List

Scan List Name: "ZumSpot" appears here (Remember, we created it previously).

# MD-380 CodePlug 101

Part IIIe

Code Plug management Concepts

(Bells and Whistles)



# Programmable Buttons

MD380 - KC6N\_MD380\_SN56098\_Virgin\_3e.rdt

File Edit Program Setting View Window Help

Buttons Definitions

Long Press Duration[ms] 1000

Radio Buttons

	Short Press	Long Press
Side Button1	Scan On/Off	Nuisance Delete
Side Button2	Unassigned (default)	Unassigned (default)

One Touch Access

No.	Mode	Call	Call Type	Message/Encode
1	Digital	Local	Text Message	Hello
2	Digital	Local	Text Message	Hello
3	Digital	Local	Text Message	Hello
4	Digital	Local	Text Message	Hello
5	Digital	Local	Text Message	Hello
6	Digital	Local	Text Message	Hello

Number Key Quick Contact Access

Number Key0	None
Number Key1	None
Number Key2	None
Number Key3	None
Number Key4	None
Number Key5	None

Programmable Buttons

Buttons

# That's it !

Thanks and back to Net Control.

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