

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

Note: a document revision history is given on the last page of this document!!

This quick reference guide will help you as Hytera DMR Newbie to setup your Hytera radio. Although the screenshots in this QRG are from an MD785G radio configuration it will give the reader enough information to setup a portable device from the PD series. **All Hytera Radios, Repeaters use the Same CPS & Same Flow Structure for Programming!** Here we go, lots of screen dumps with as little as possible text... No text below a figure, this means leave as is... or edit to your own personal needs.

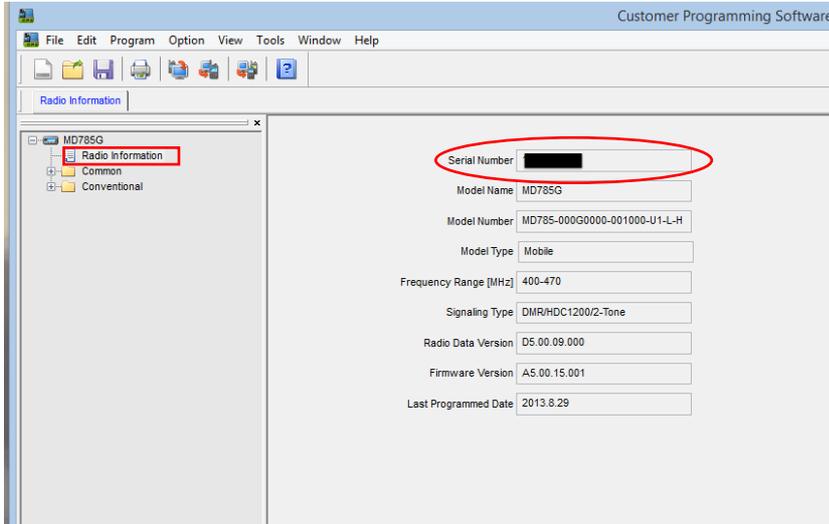


Figure 1 Radio Information window

Note on the left side the directory structure, just like in your file browser just click a "directory" the content is shown. Double click a "file" and its content is shown on the right.

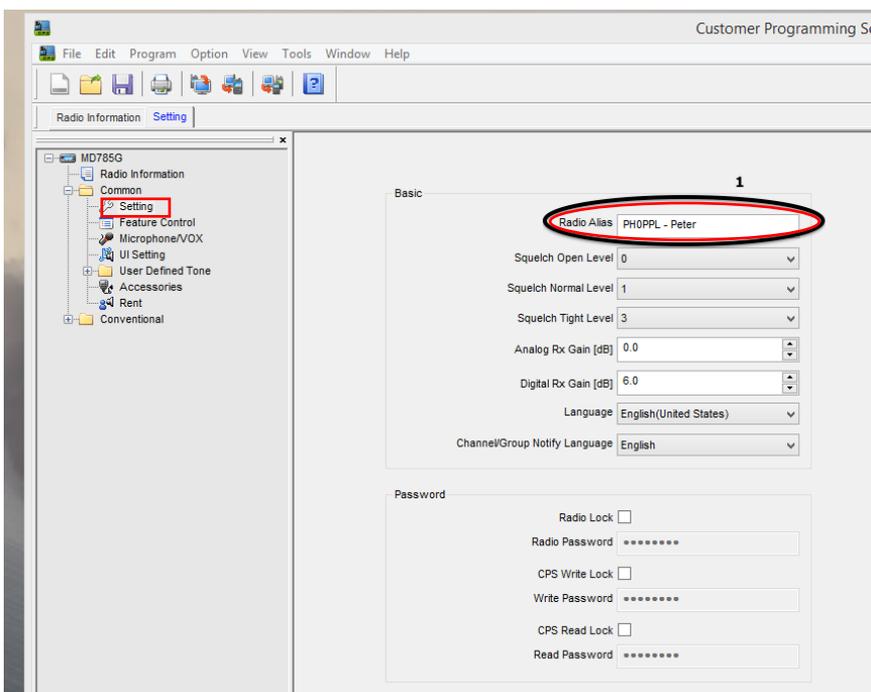
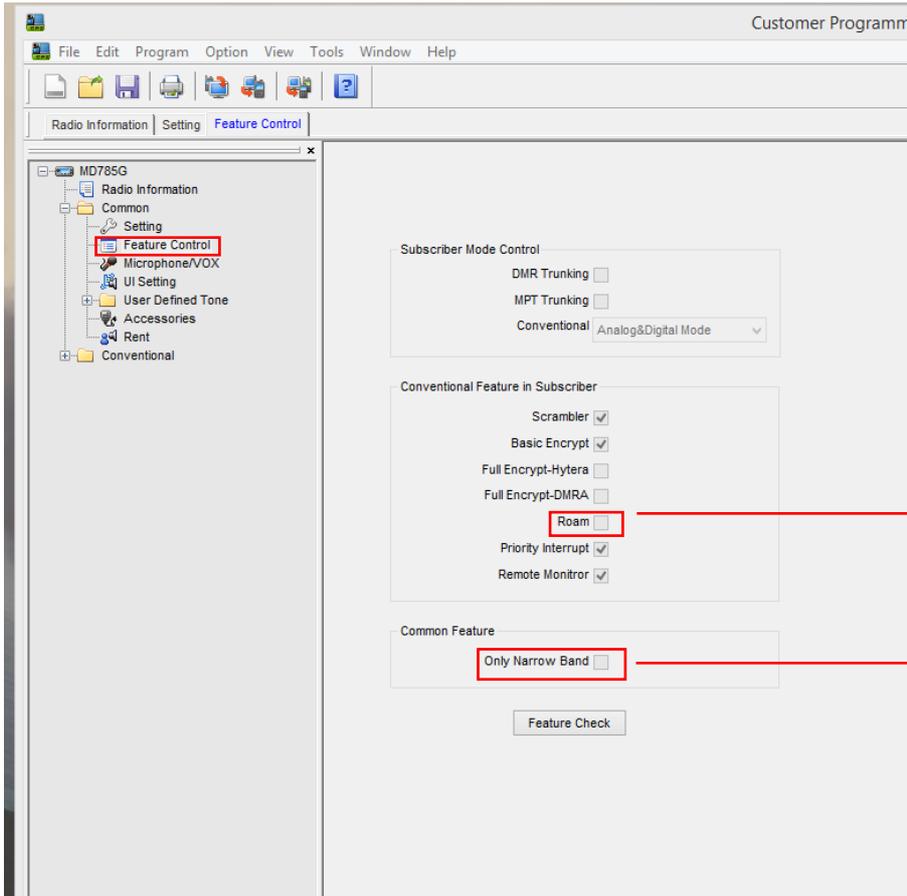


Figure 2 Common - Settings

Oval #1: enter your radios alias (suggested format: <callsign> <-> <name>)

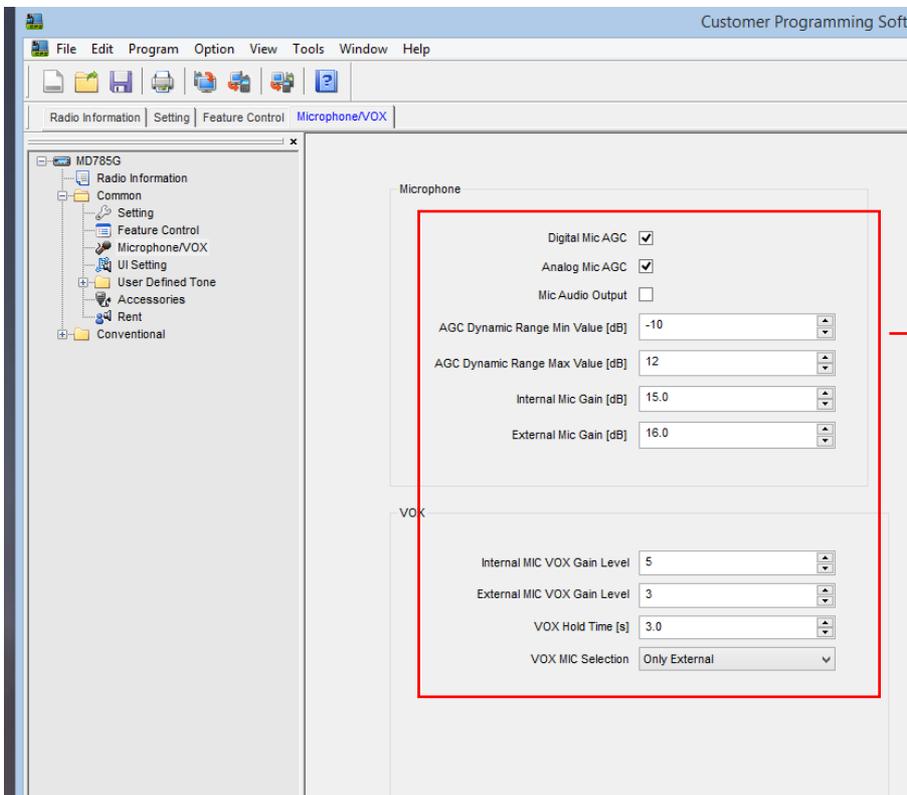
# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)



**Roaming is Standard on all New radios, and will be Checked using CPS V6.01 or Newer.**

**Be sure to have your Authorized Dealer Wide band your unit. or this will be "checked" for Narrow Band Only!**

Figure 3 Common – Feature Control



**All Factory Settings should be sufficient for normal operations. change is Not Recommended!**

Figure 4 Common – Microphone/VOX

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

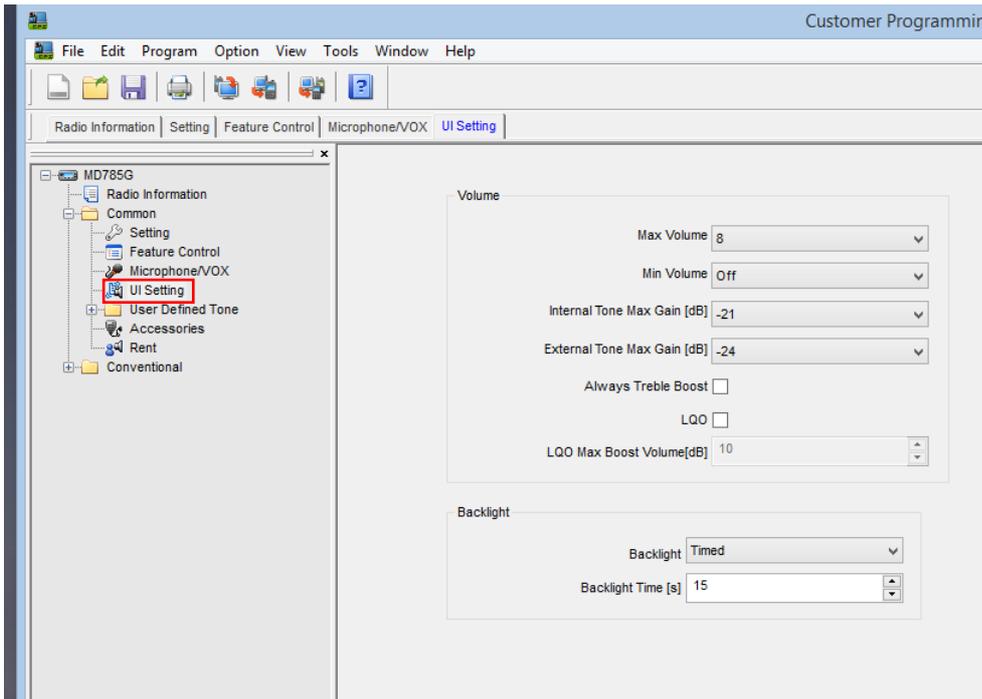
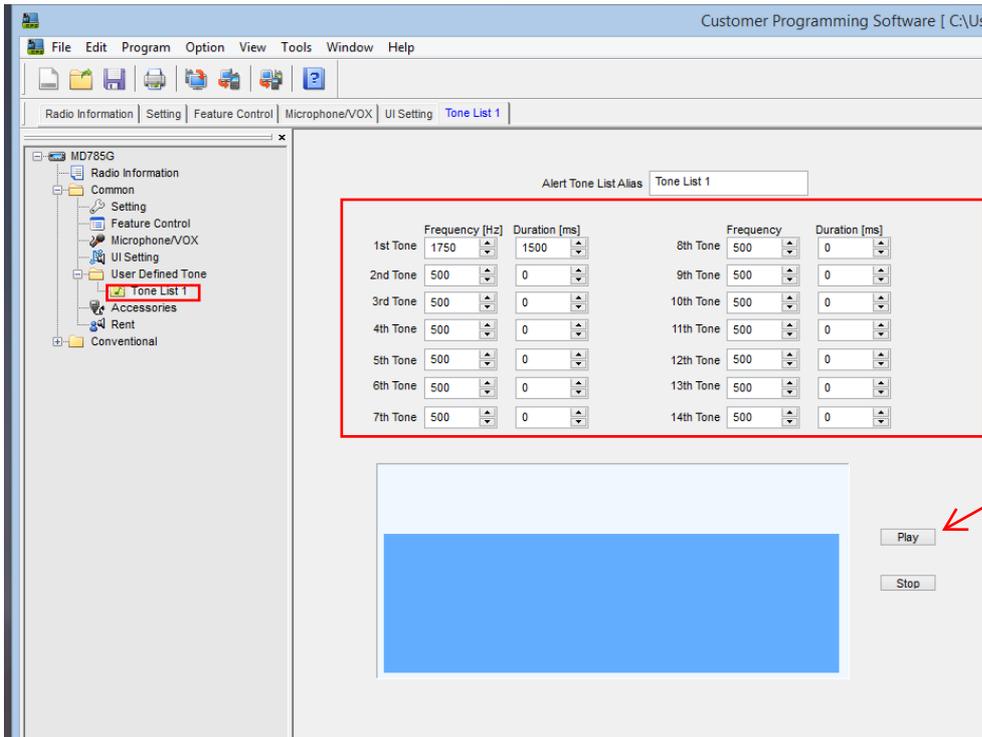


Figure 5 Common – UI Setting



Use this field to Create Custom Tones. Use The Graph and Play Function to hear your Newly Created Tones.

Figure 6 Common – User Defined Ton – Tone List

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.10.002.EM5 (old version) **Newest Version is v6.01.01.006.na2**

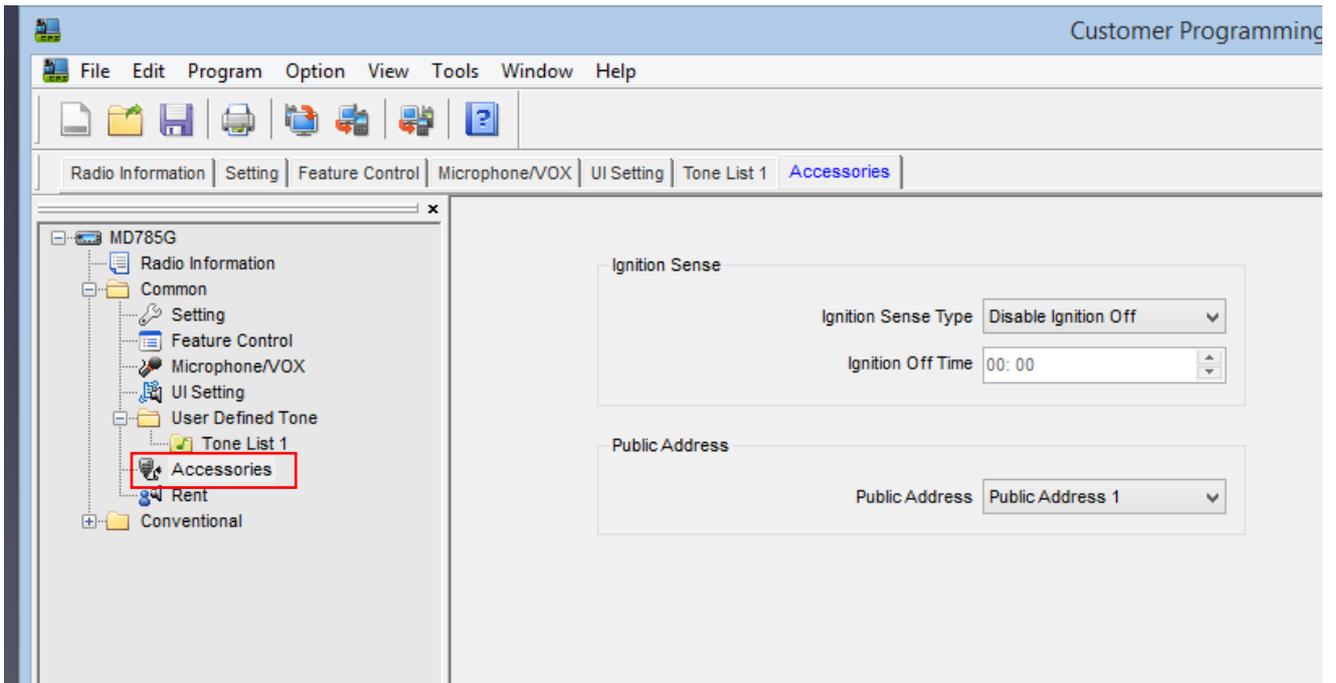


Figure 7 Common – Accessoires (old sw version)

CPS version: V5.05.13.010.EM5 (new version)

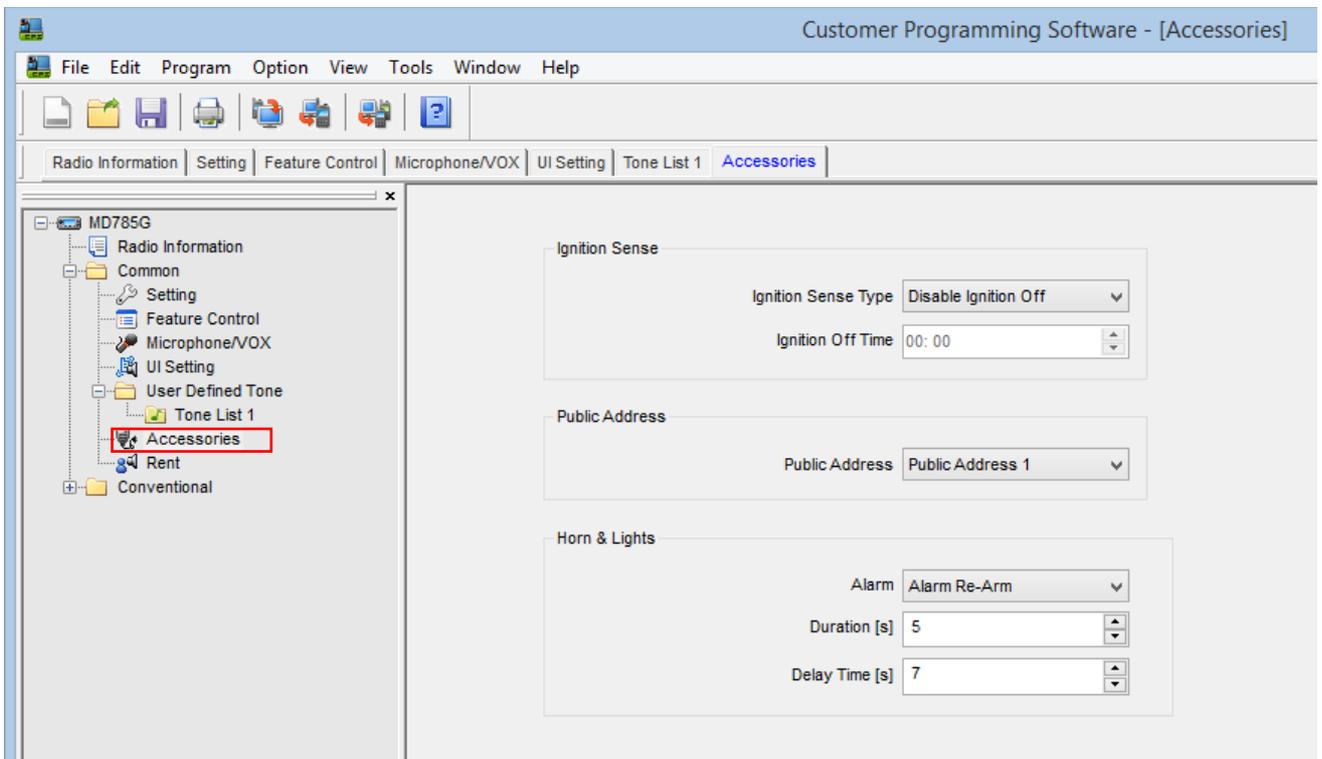


Figure 8 Common – Accessoires (new sw version)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

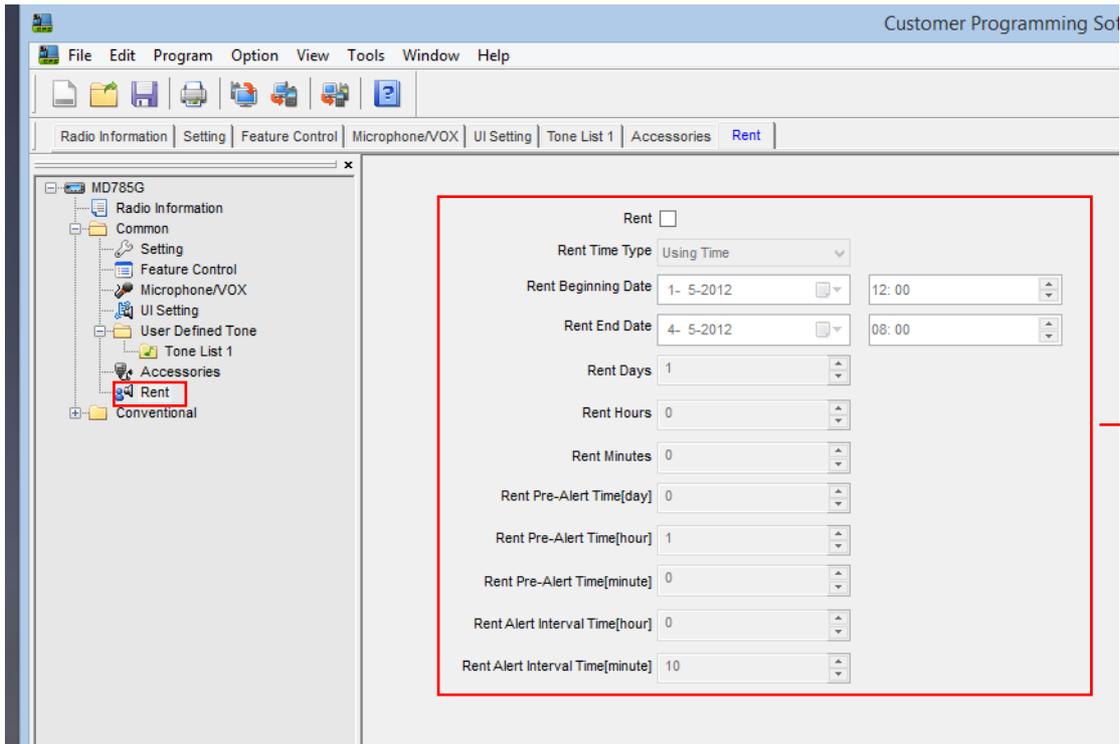


Figure 9 Common – Rent

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

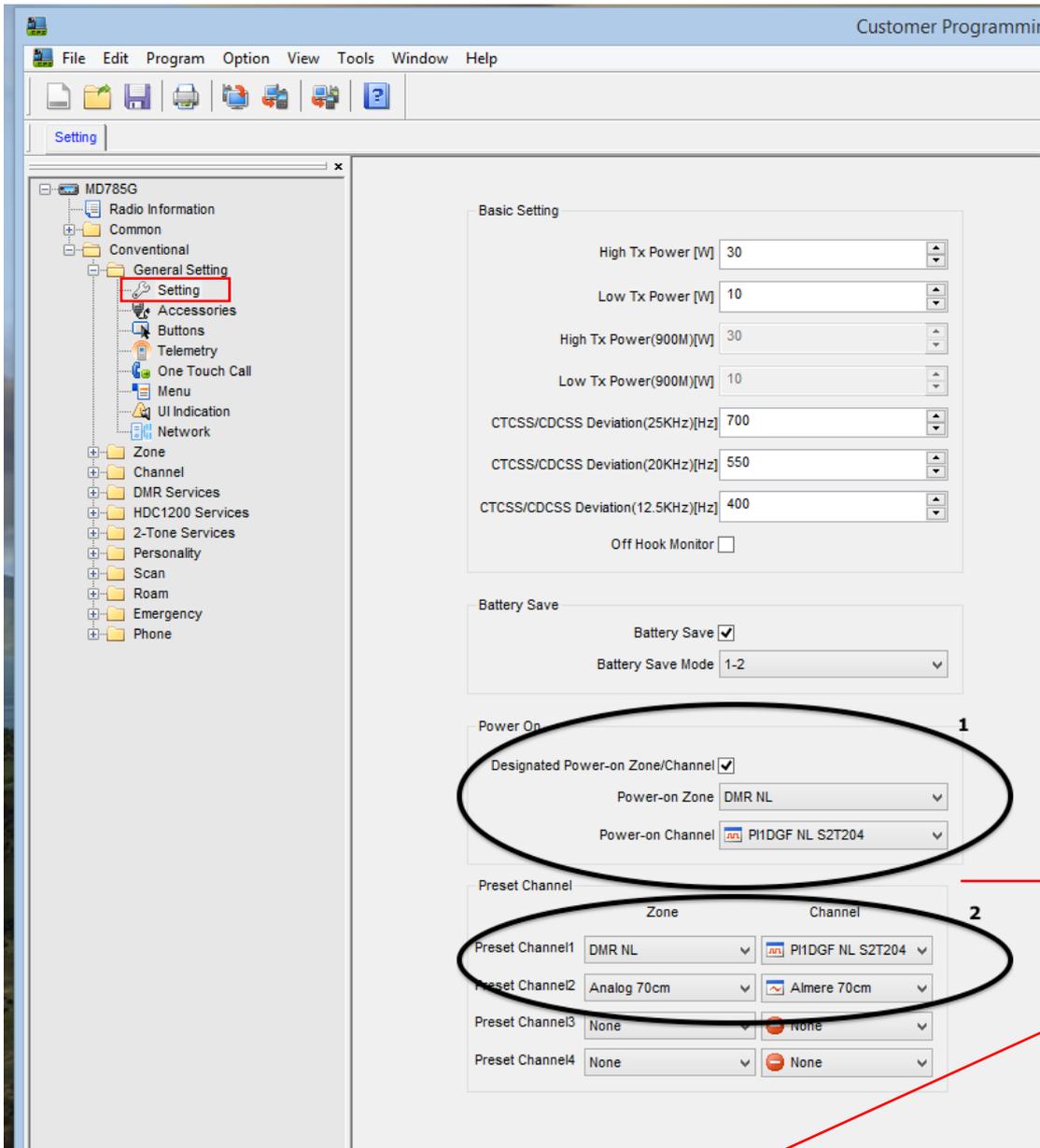


Figure 10 Conventional – General Setting – Setting

Oval #1: here you can configure your power on ZONE and Repeater Channel.

Oval #2: here you can configure you preset channels.

Note: this section can only be configured AFTER you have configured your ZONE and CHANNEL list.

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.10.002.EM5 (old version)

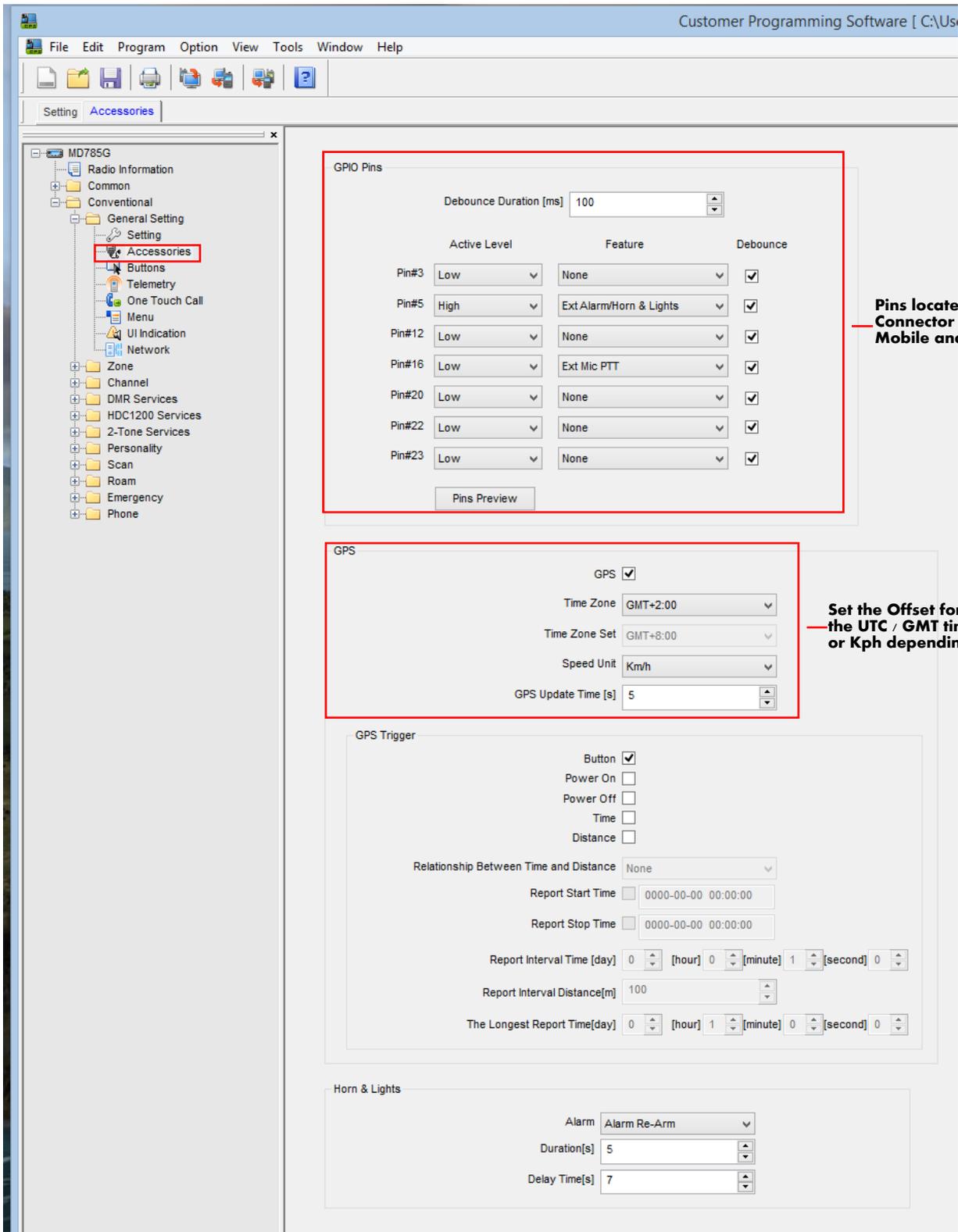
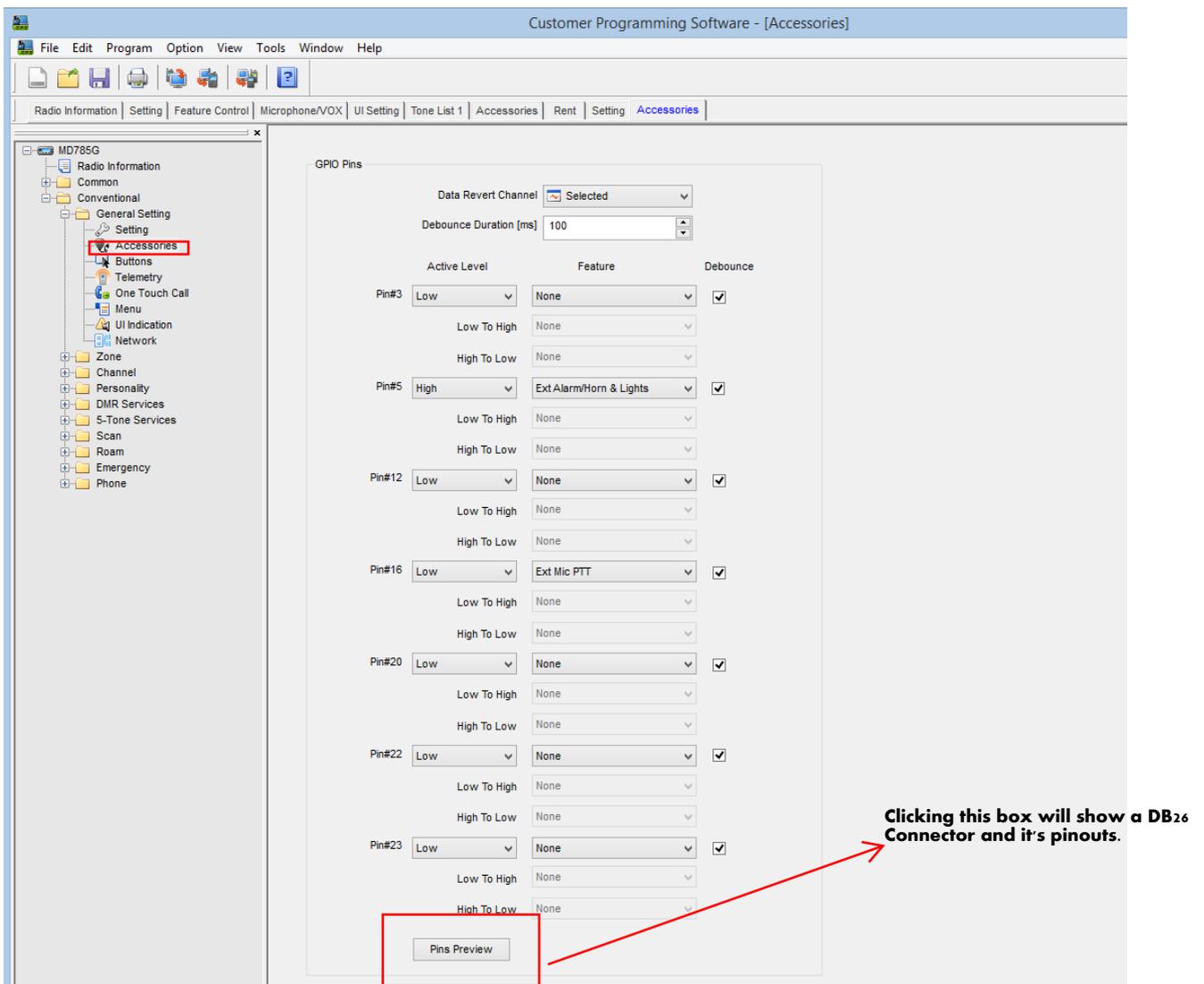


Figure 11 Conventional – General Setting – Accessories (old sw version)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.13.010.EM5 (new version)



The second part of the screenshot is shown on the next page!

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

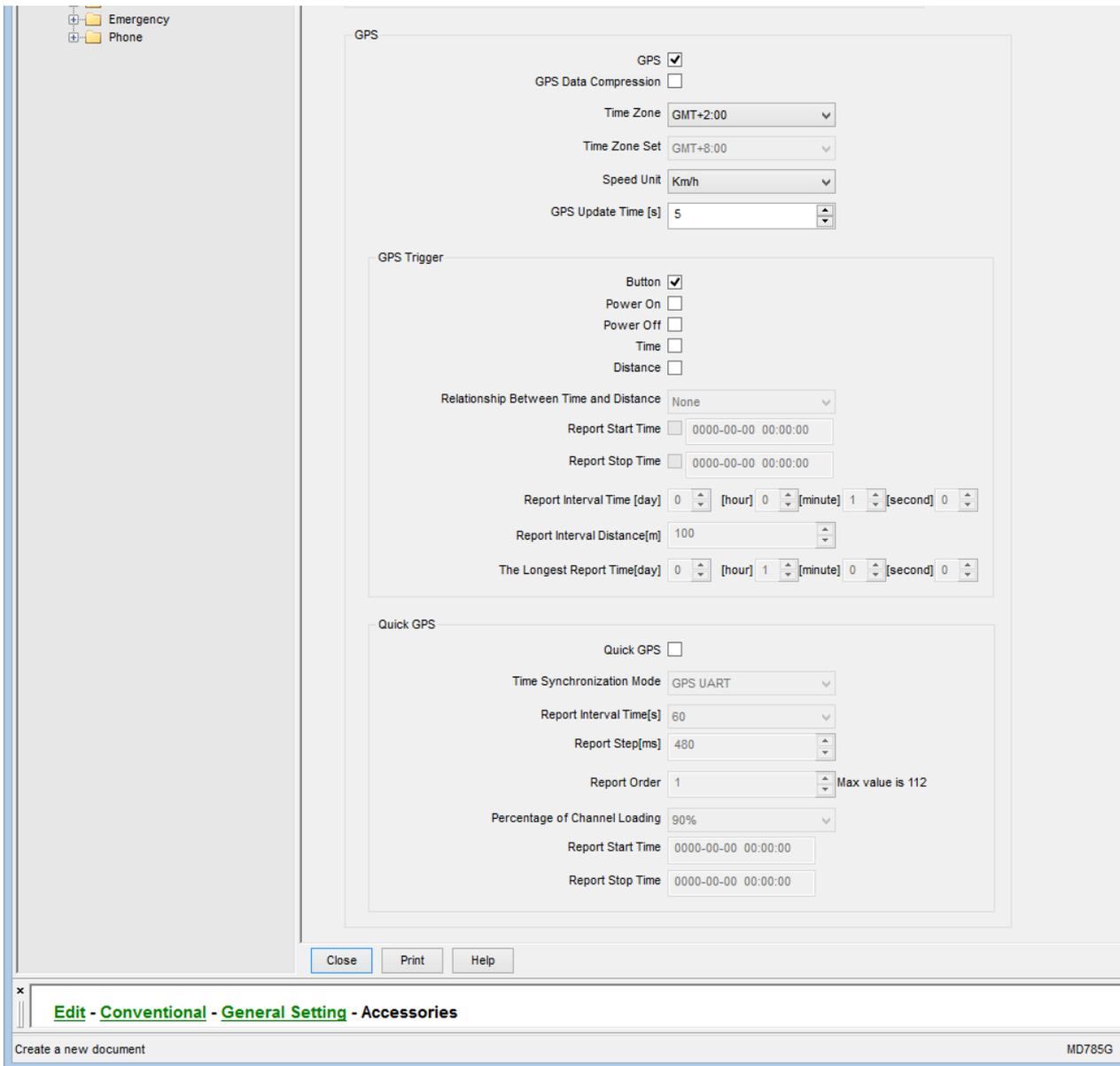


Figure 12 Conventional – General Setting – Accessories (new sw version)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

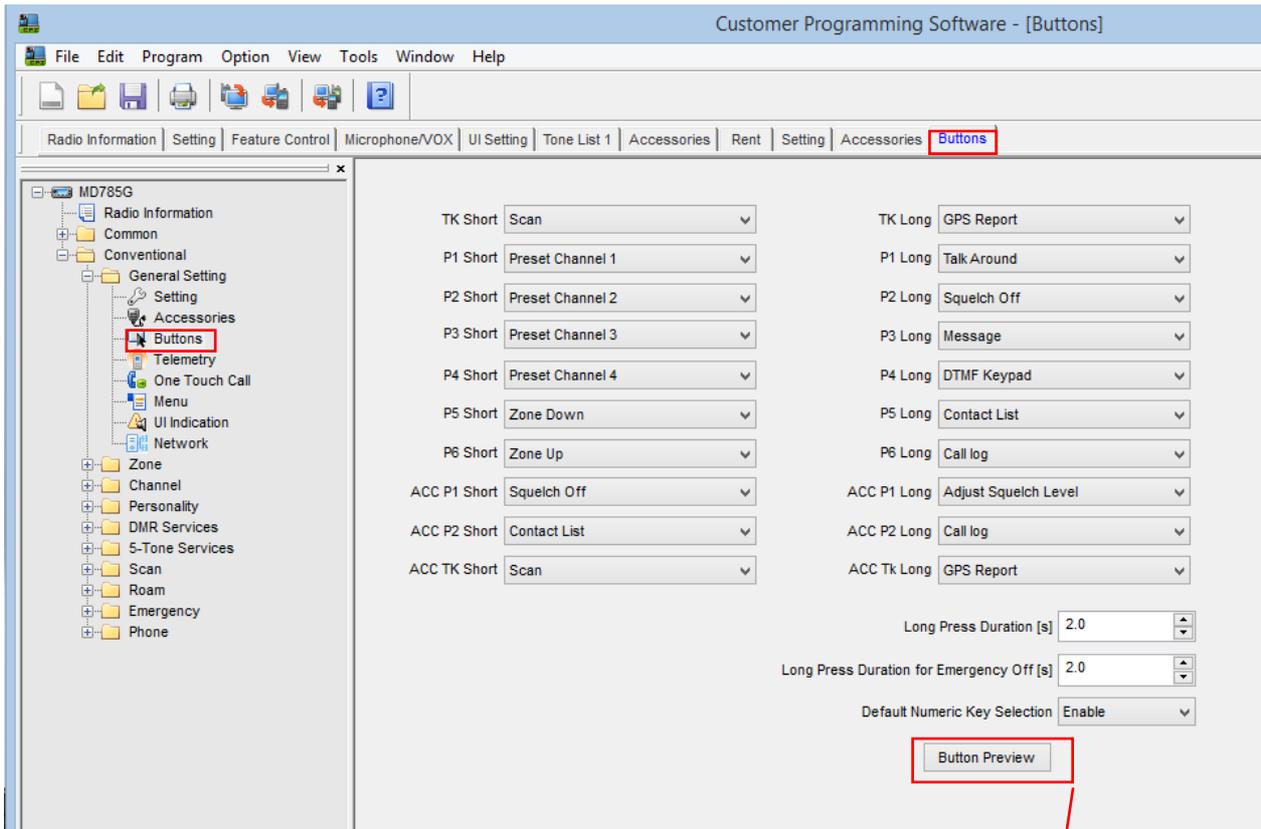


Figure 13 Conventional – General Setting – Buttons

Here you can configure your “hard keys” to your own preferences.

TIP: click **Button Preview** to see where these buttons are on your radio/microphone.

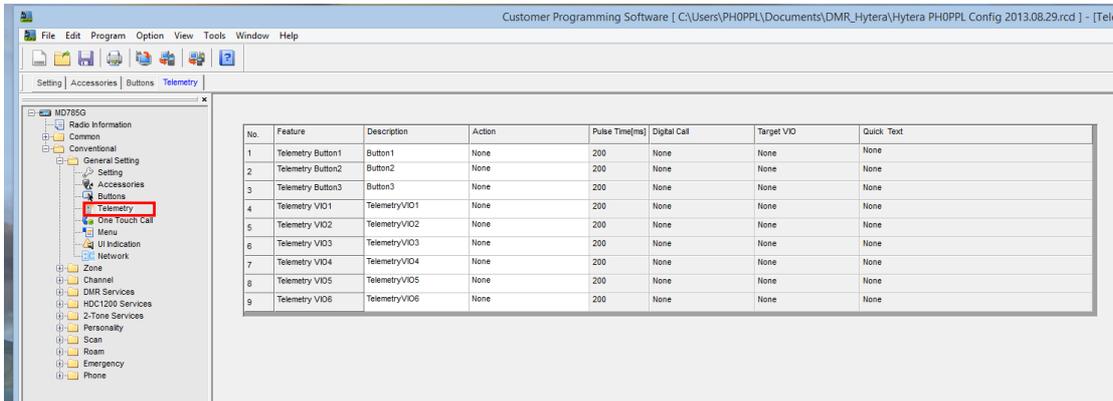


Figure 14 Conventional – General Setting – Telemetry

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

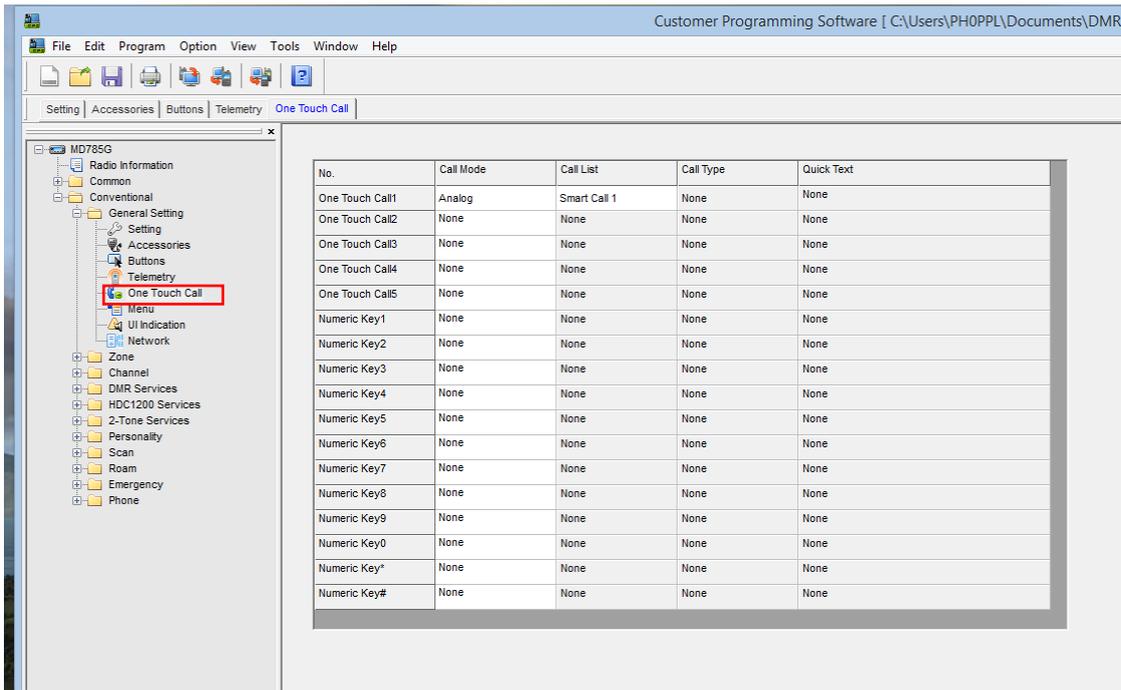


Figure 15 Conventional – General Setting – One Touch Call

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.10.002.EM5 (old version)

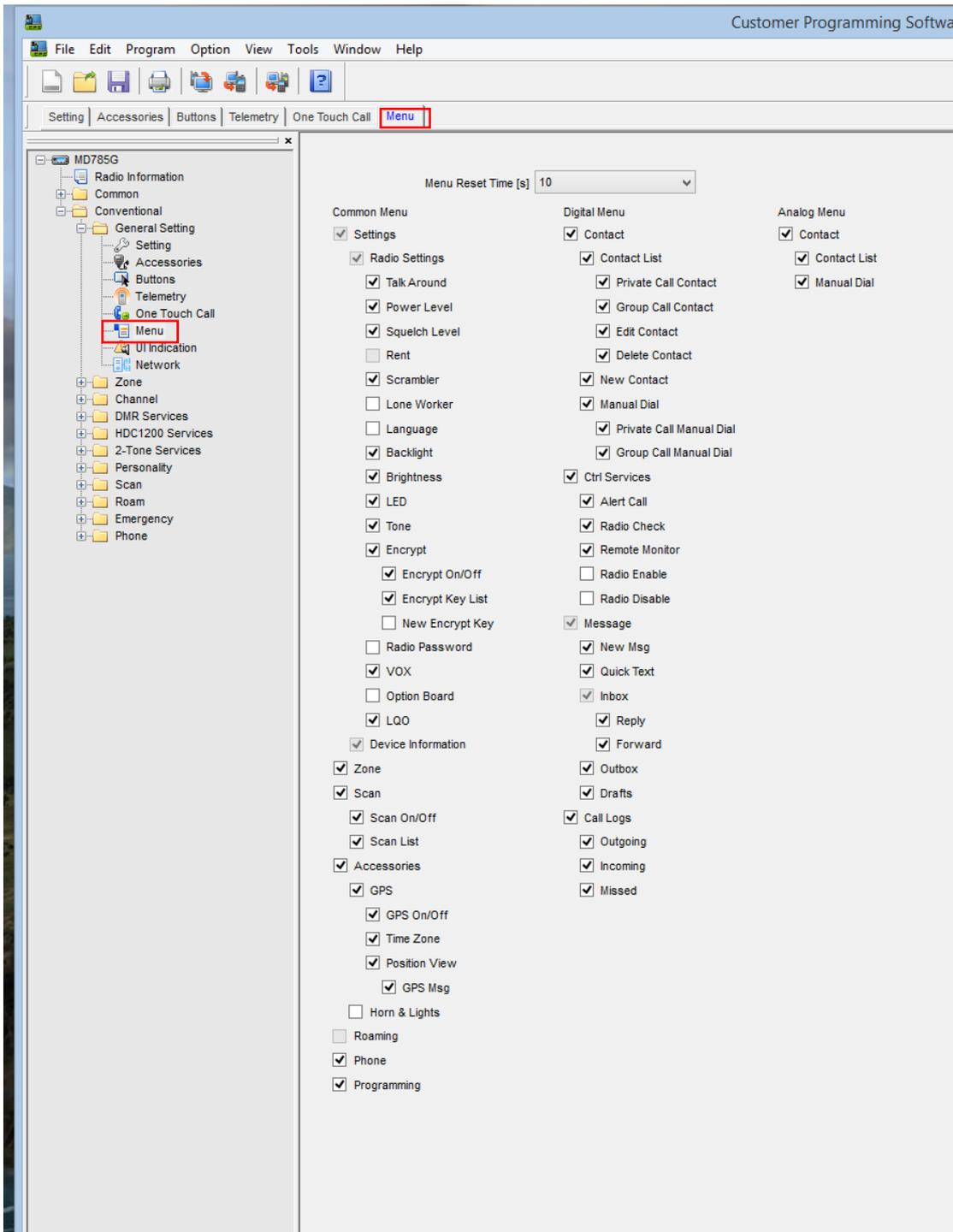
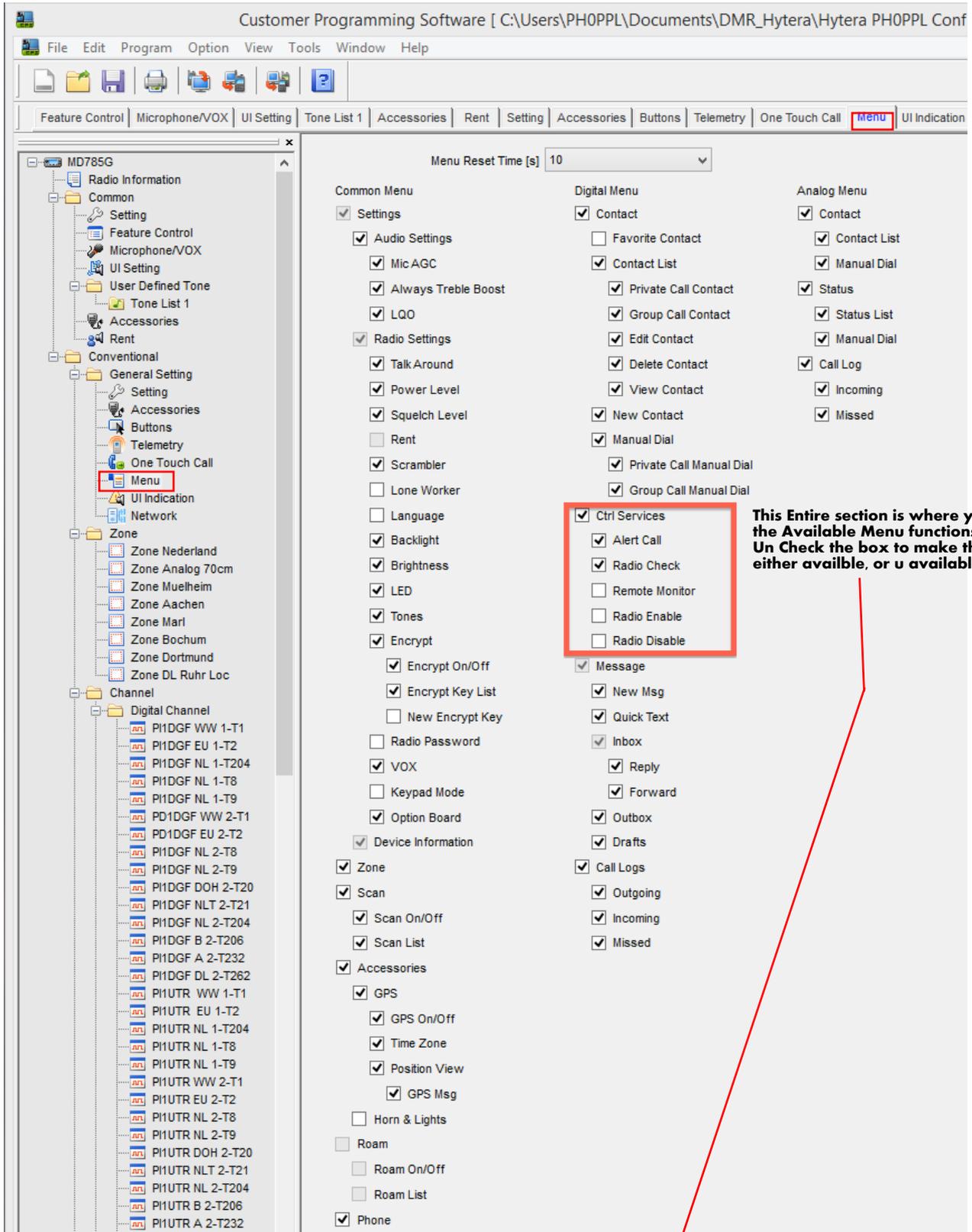


Figure 16 Conventional – General Setting – Menu (old sw version)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.13.010.EM5 (new version) **Newest Version = V6.01.01.006.na2**



This Entire section is where you will setup the Available Menu functions. check or Un Check the box to make the function either available, or u available to the user.

Take a look at the red square "Ctrl Services". Unless you know what you are doing uncheck the last 3 service as shown. Consult the Help Function in your CPS software for details about this functionality for further details.

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

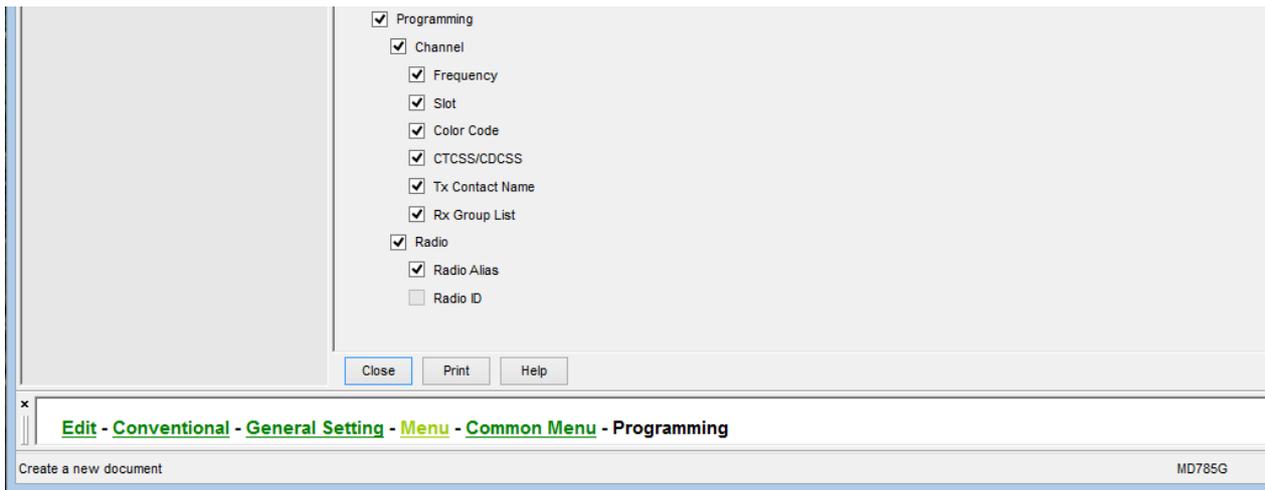


Figure 17 Conventional – General Setting – Menu (new sw version)

Here you can configure the radios menu to your own liking.

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

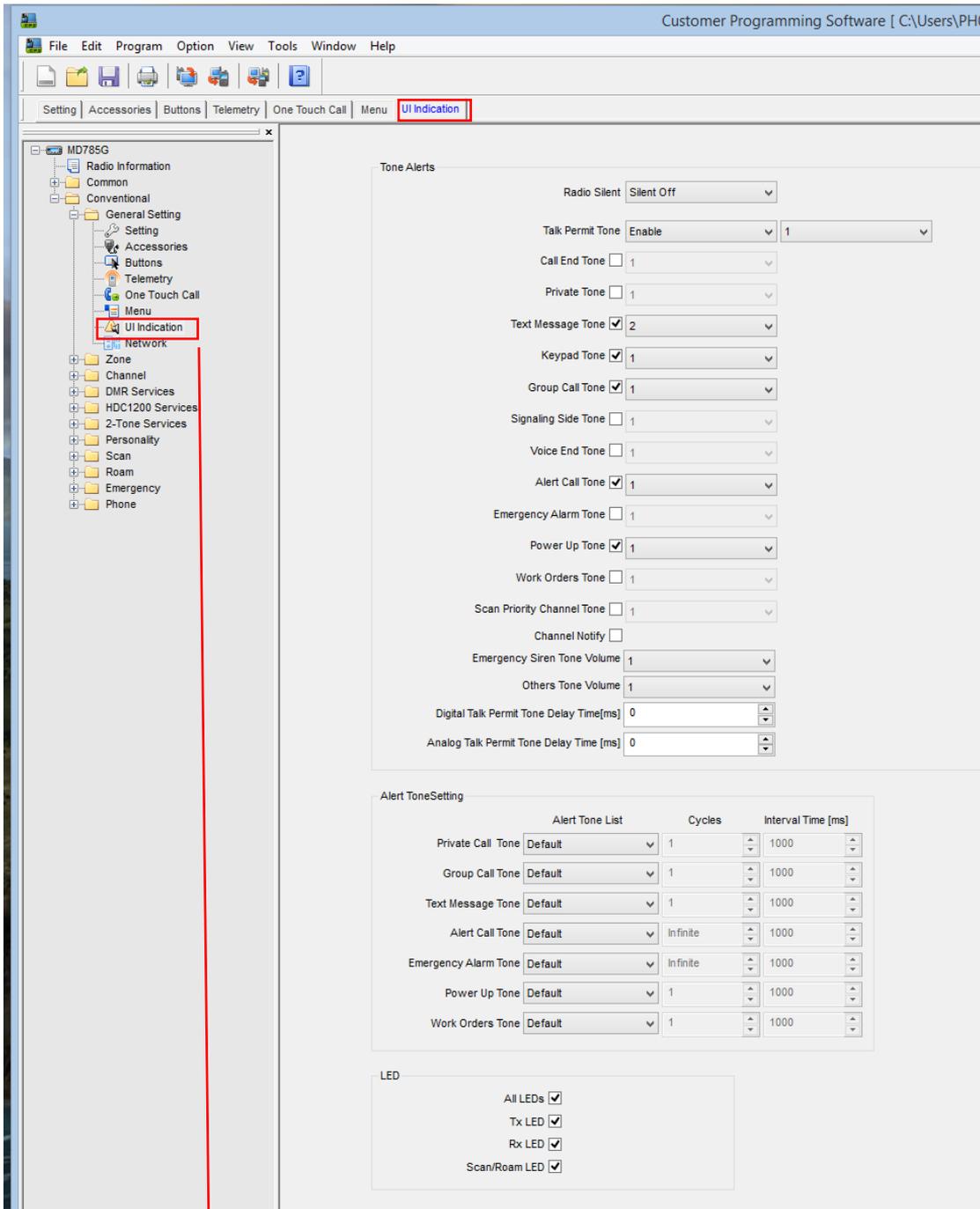


Figure 18 Conventional – General Setting – UI Indication

Here you can configure the radio its user interface, turn on, off, adjust volume of beeps etc. Also the LED ring in the knob its behavior can be set. **or the LED on your Portable unit.**

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.10.002.EM5 (old version)

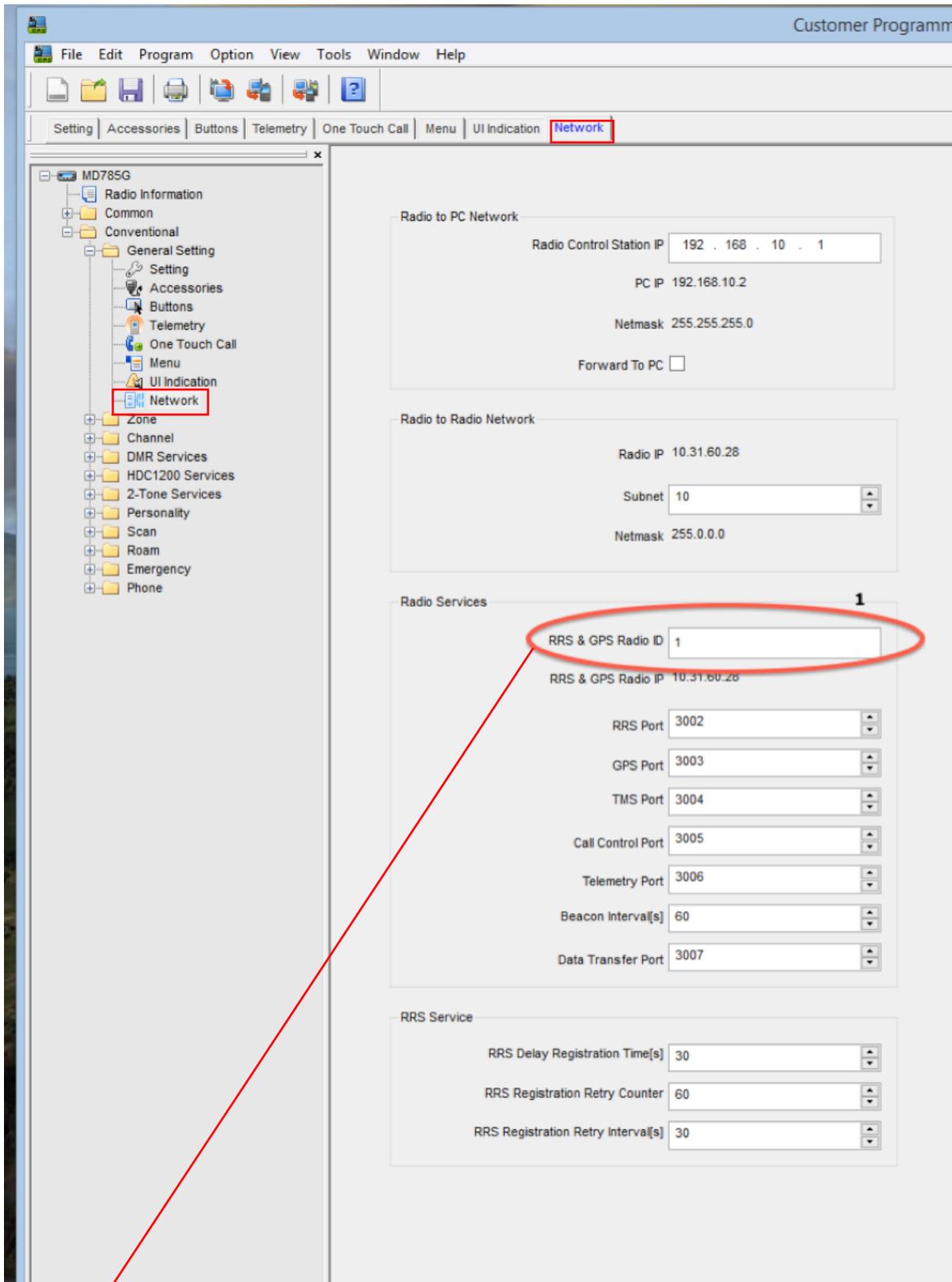


Figure 19 Conventional – General Setting – Network (old sw version)

**OVAL #1** Leave at its default value "1", do NOT enter your own DMR-MARC ID here (204XYYY).

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.13.010.EM5 (new version)

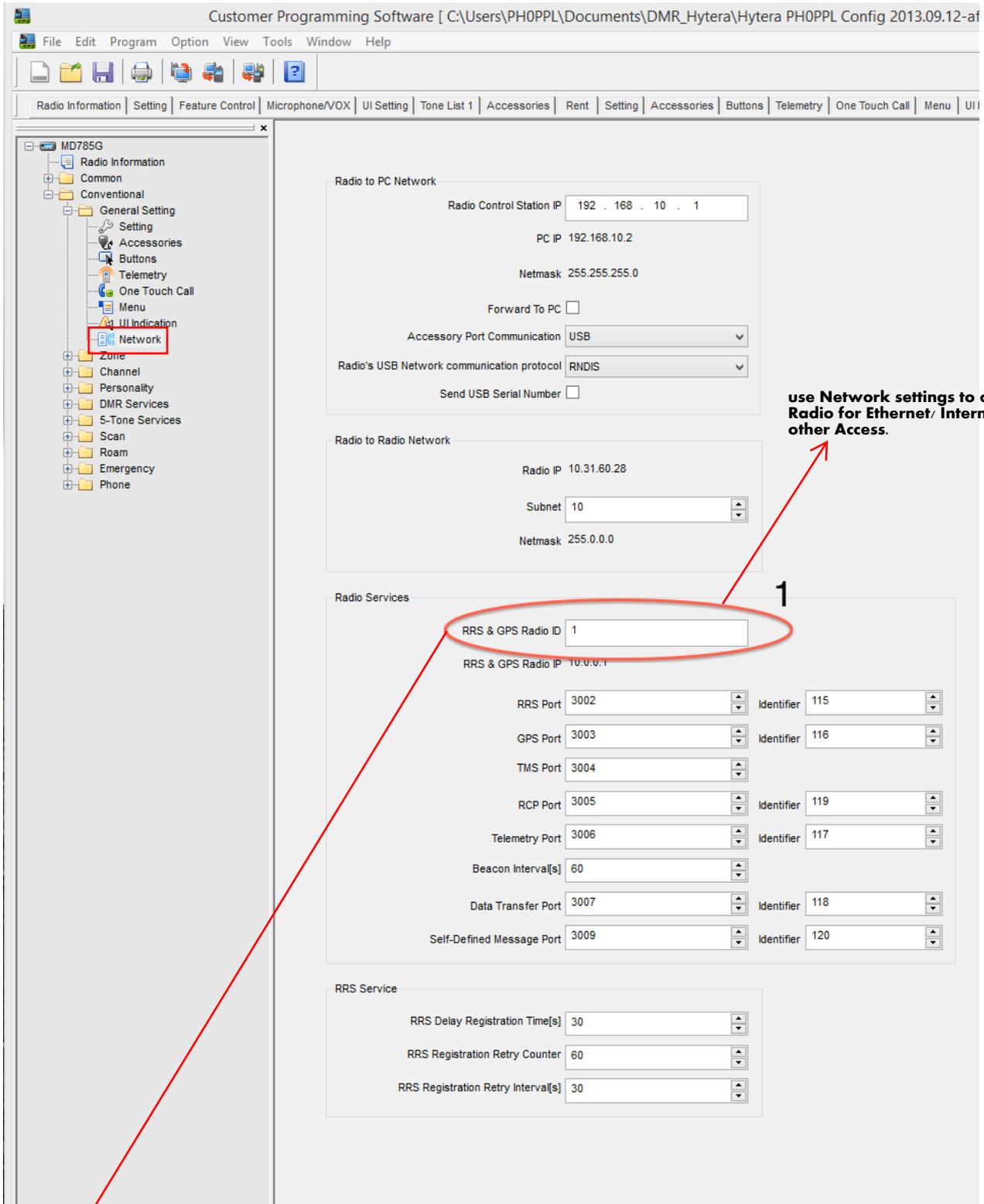


Figure 20 Conventional – General Setting – Network (new sw version)

**OVAL #1:** Leave at its default value "1", do NOT enter your own DMR-MARC ID here (204XXXX).

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

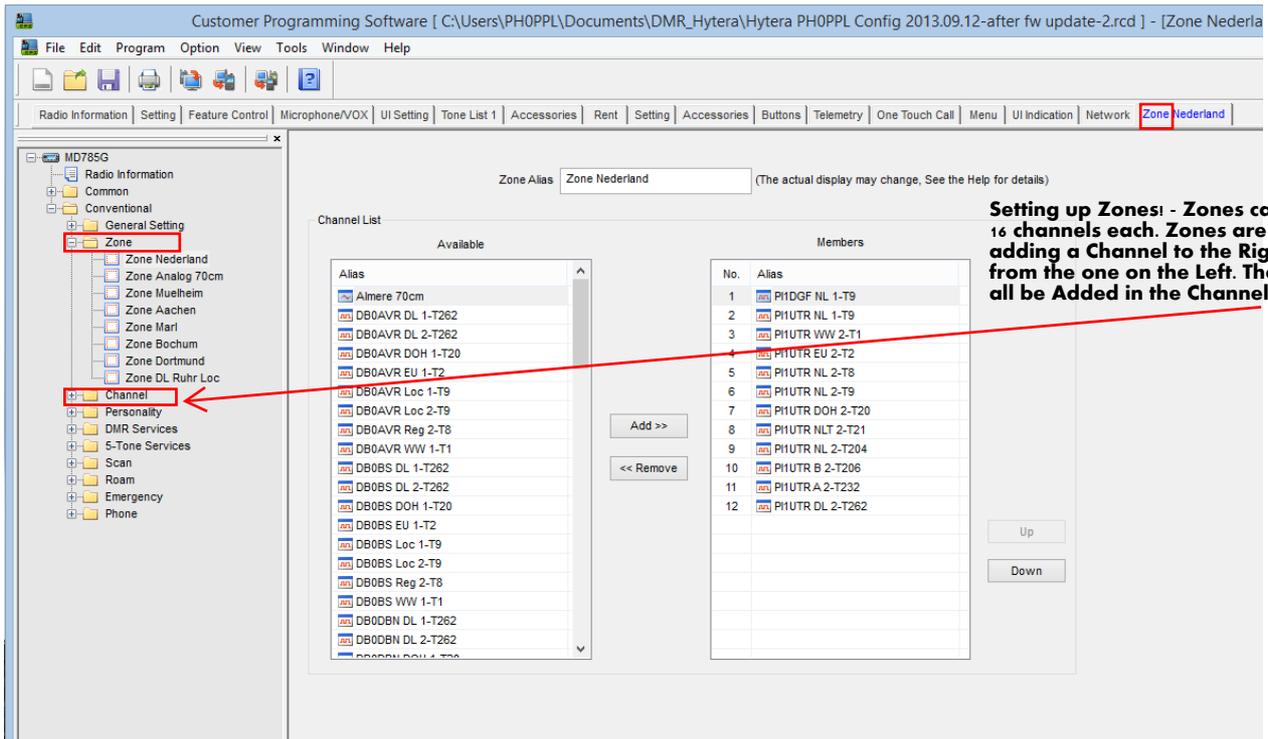


Figure 21 Conventional – Zone (example 1)

This section is important!! Here you configure your Zones, take a look at figure 17 and 18 and you get the idea.

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

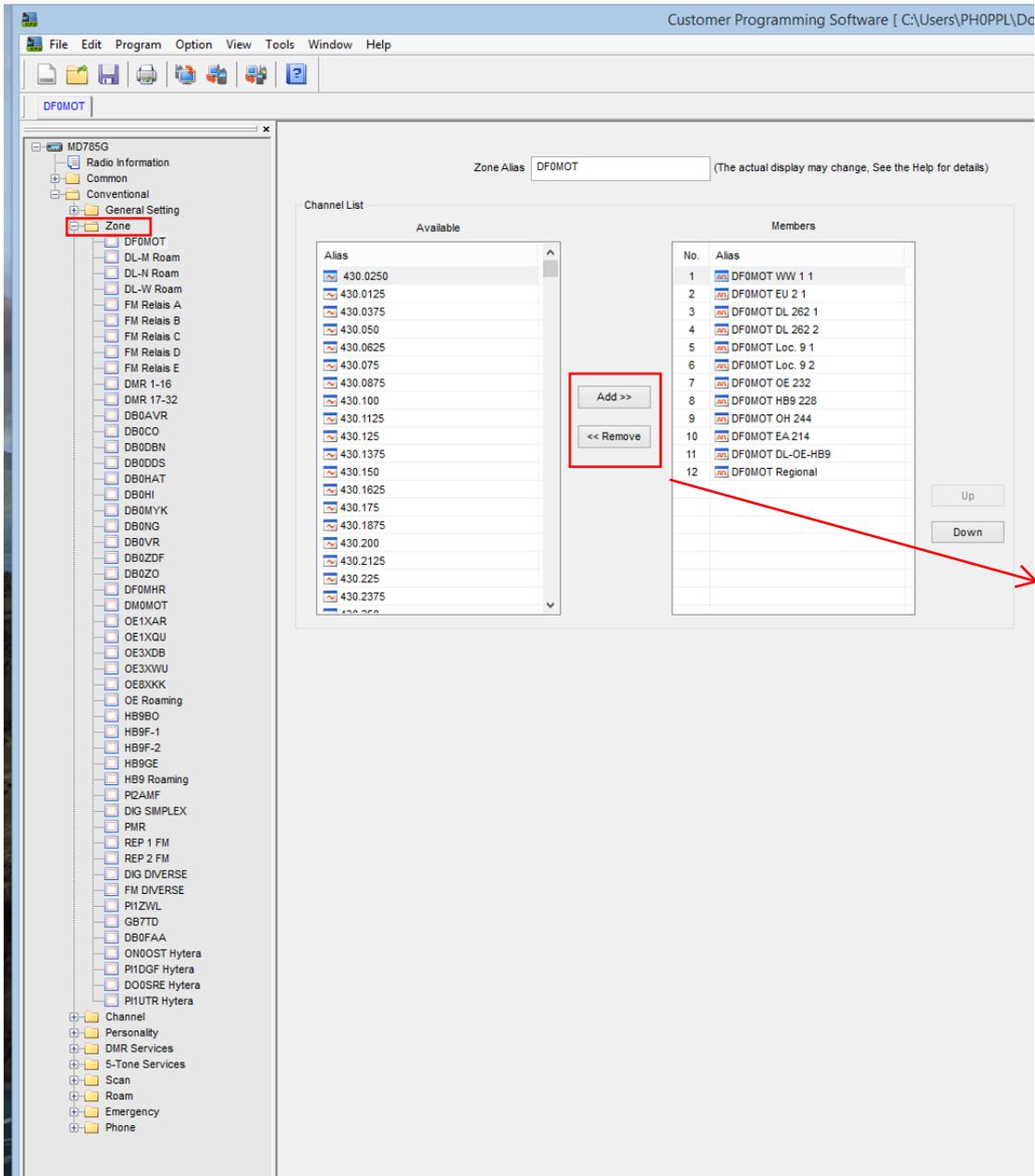


Figure 22 Conventional – Zone (example 2)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.10.002.EM5 (old version)

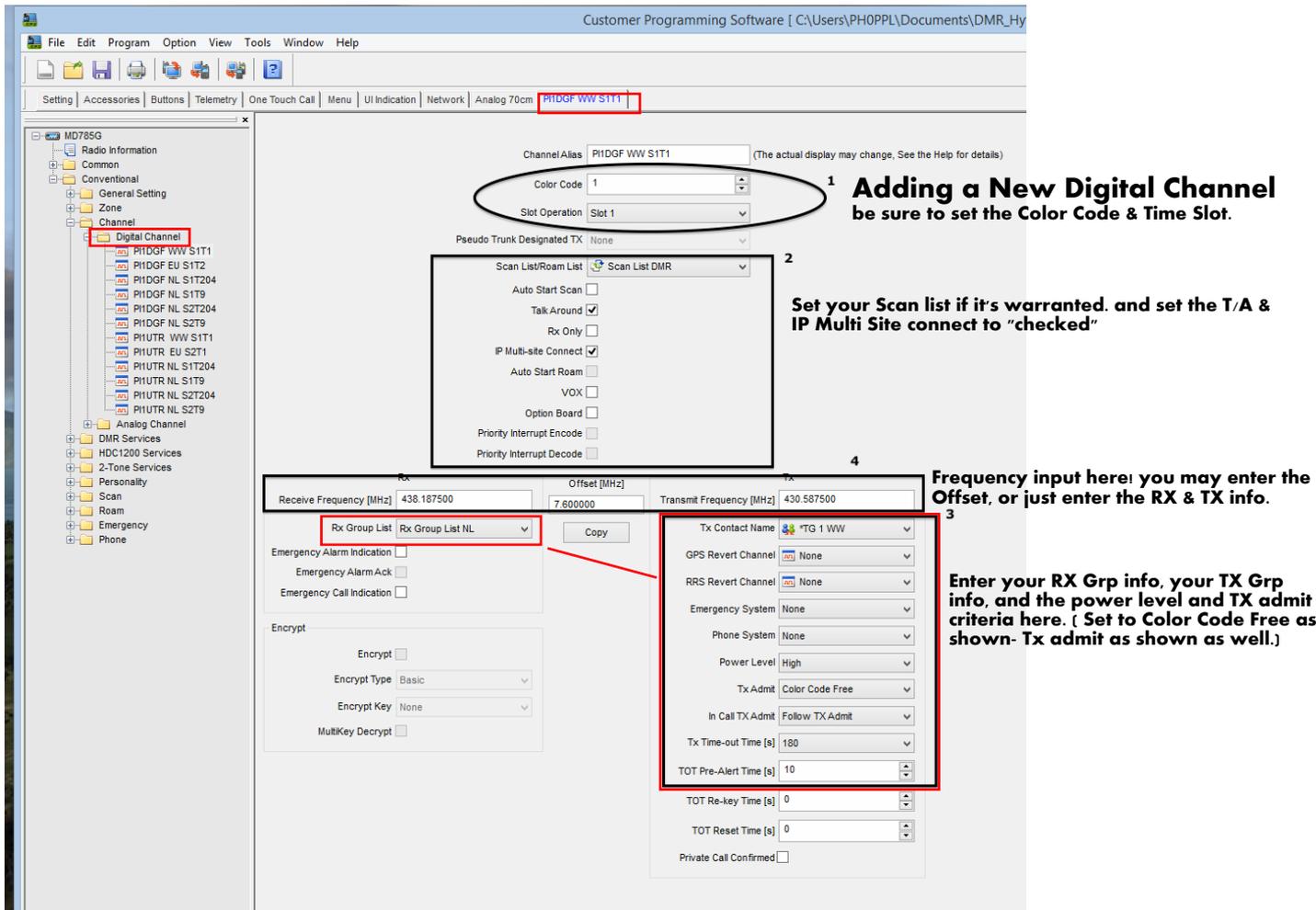


Figure 23 Conventional – Channel (example 1) – (old sw version)

This section is important!! Here you configure your Channels, take a look at figure 19 and 20 and you get the idea.

Oval #1: set color code and time slot

Rectangle #2: Configure to your needs, for example set your preferred Scan List / Roam List, if you are uncertain copy this...

Rectangle #3: Configure to your needs, if you are uncertain copy this...

Rectangle #4: Set the TX and RX frequencies.

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.13.010.EM5 (new version)

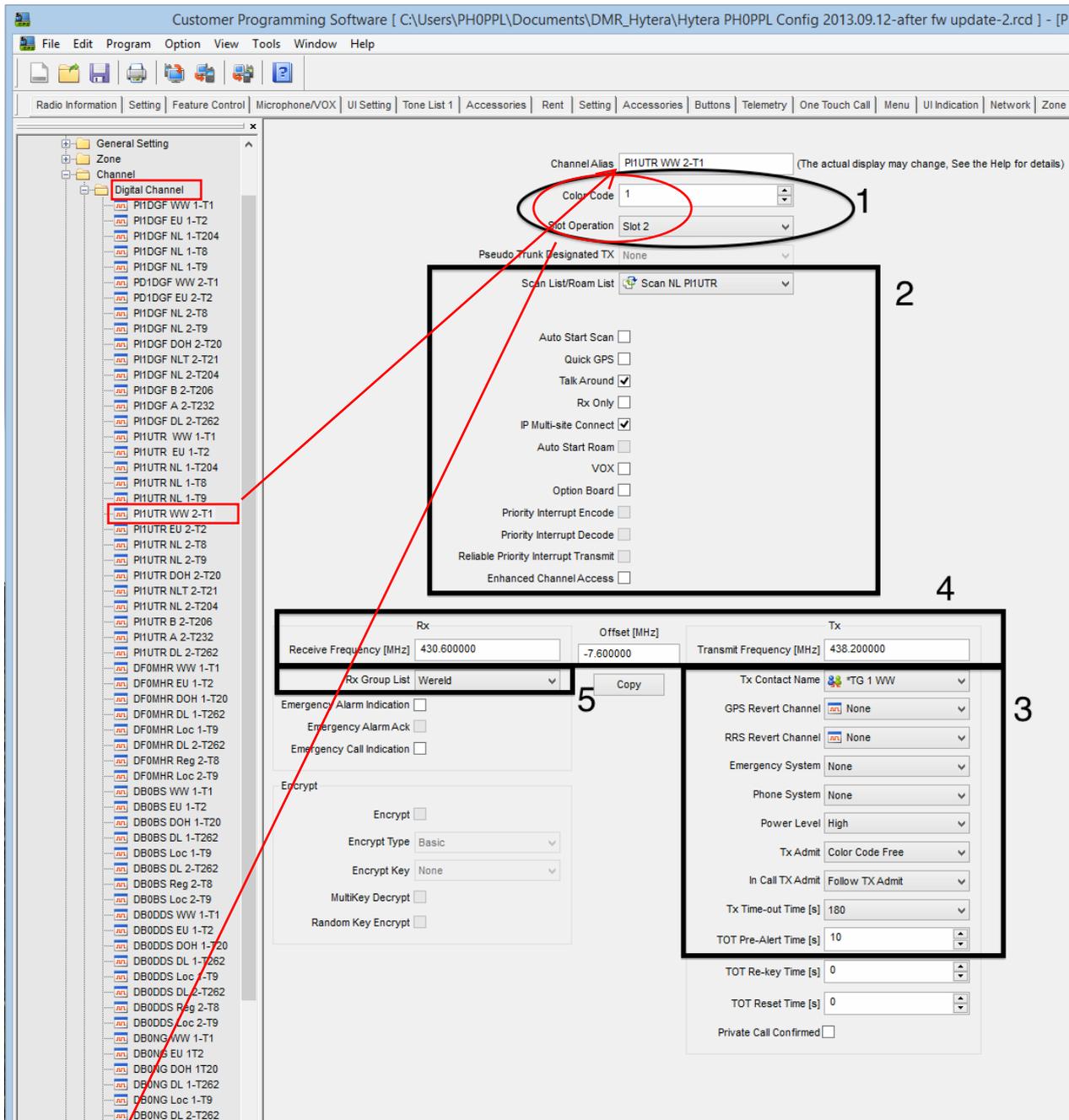


Figure 24 Conventional – Channel (example 1) – (new sw version)

This section is important!! Here you configure your Channels, take a look at figure 19 and 20 and you get the idea.

Oval #1: set color code and time slot

Rectangle #2: Configure to your needs, for example set your preferred Scan List / Roam List, if you are uncertain copy this...

Rectangle #3: Configure to your needs, if you are uncertain copy this...

Rectangle #5: optional set the RX grouplist.

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

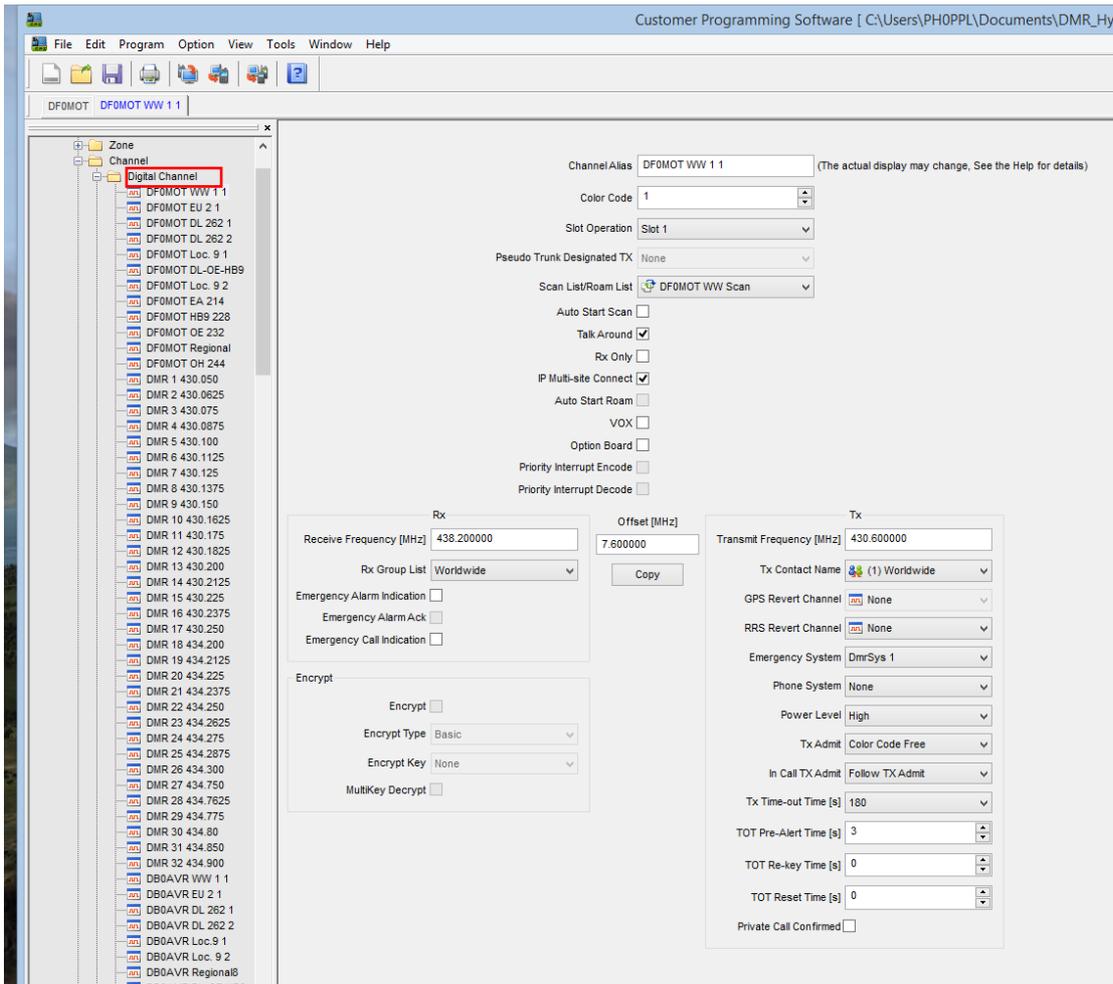


Figure 25 Conventional – Channel (example 2)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.10.002.EM5 (old version)

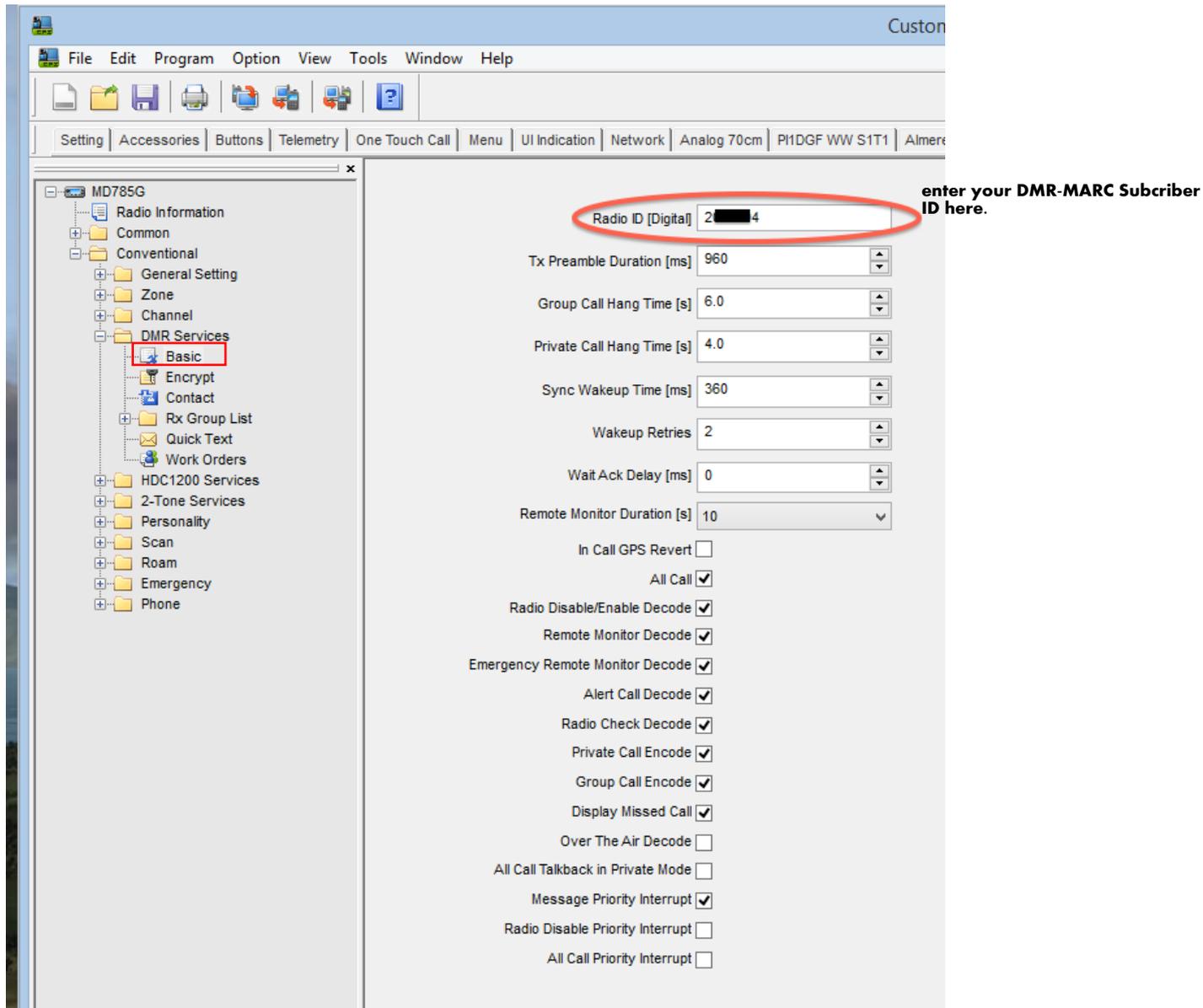


Figure 26 Conventional – DMR Services – Basic (old sw version)

**IMPORTANT: configure here your RADIO ID (DMR-MARC ID), 204XXXX.**

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.13.010.EM5 (new version)

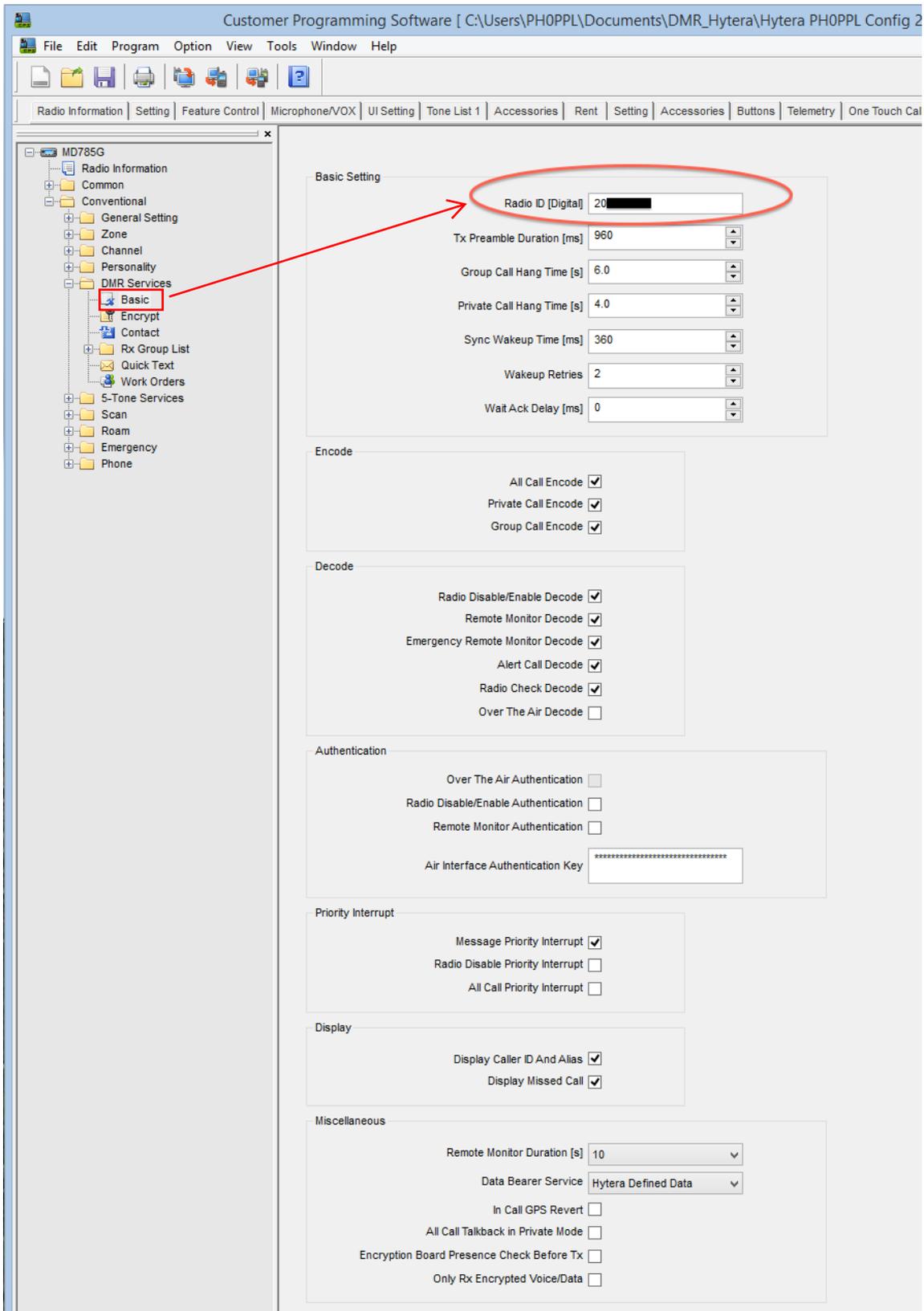
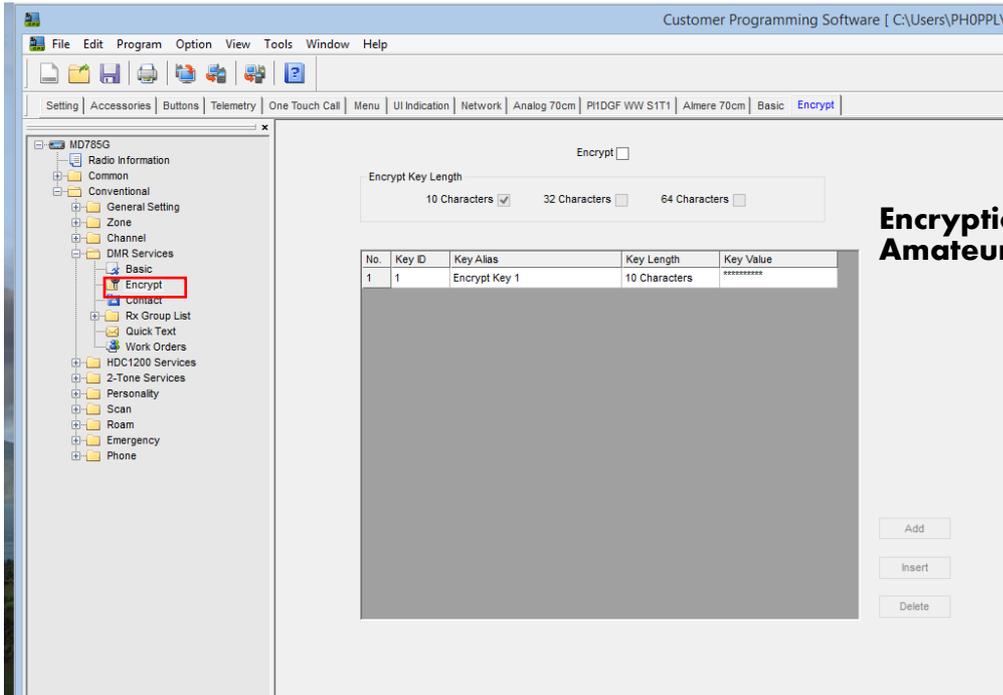


Figure 27 Conventional – DMR Services – Basic (new sw version)

**IMPORTANT: configure here your RADIO ID (DMR-MARC ID), 204XXXX.**

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)



**Encryption is Not Allowed in the Amateur Service.**

Figure 28 Conventional – DMR Services – Encrypt

CPS version: V5.05.10.002.EM5 (old version)

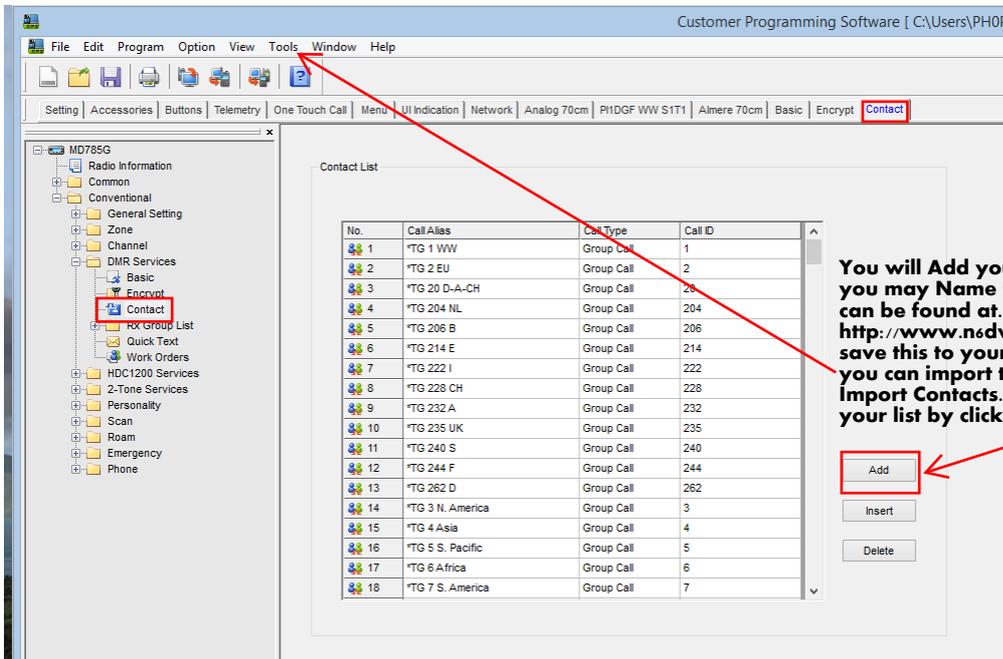


Figure 29 Conventional – DMR Services – Contact (example 1) – (old sw version)

Again this is an important section! Configure all our talk groups here. The two examples should give you an idea how you can do this, take a close look at the CALL ALIAS in these two examples. Both work, its personal taste what suites you the best.

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.10.002.EM5 (old version)

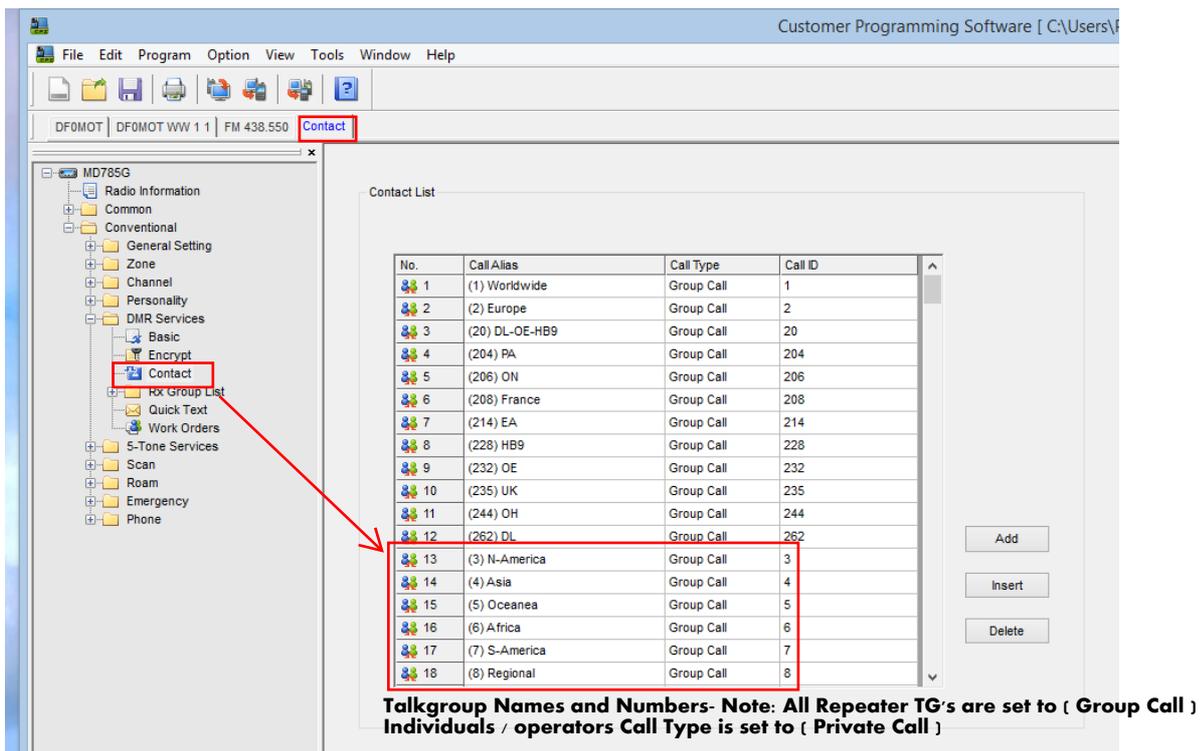


Figure 30 Conventional – DMR Services – Contact (example 2) – (old sw version)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.13.010.EM5 (new version)

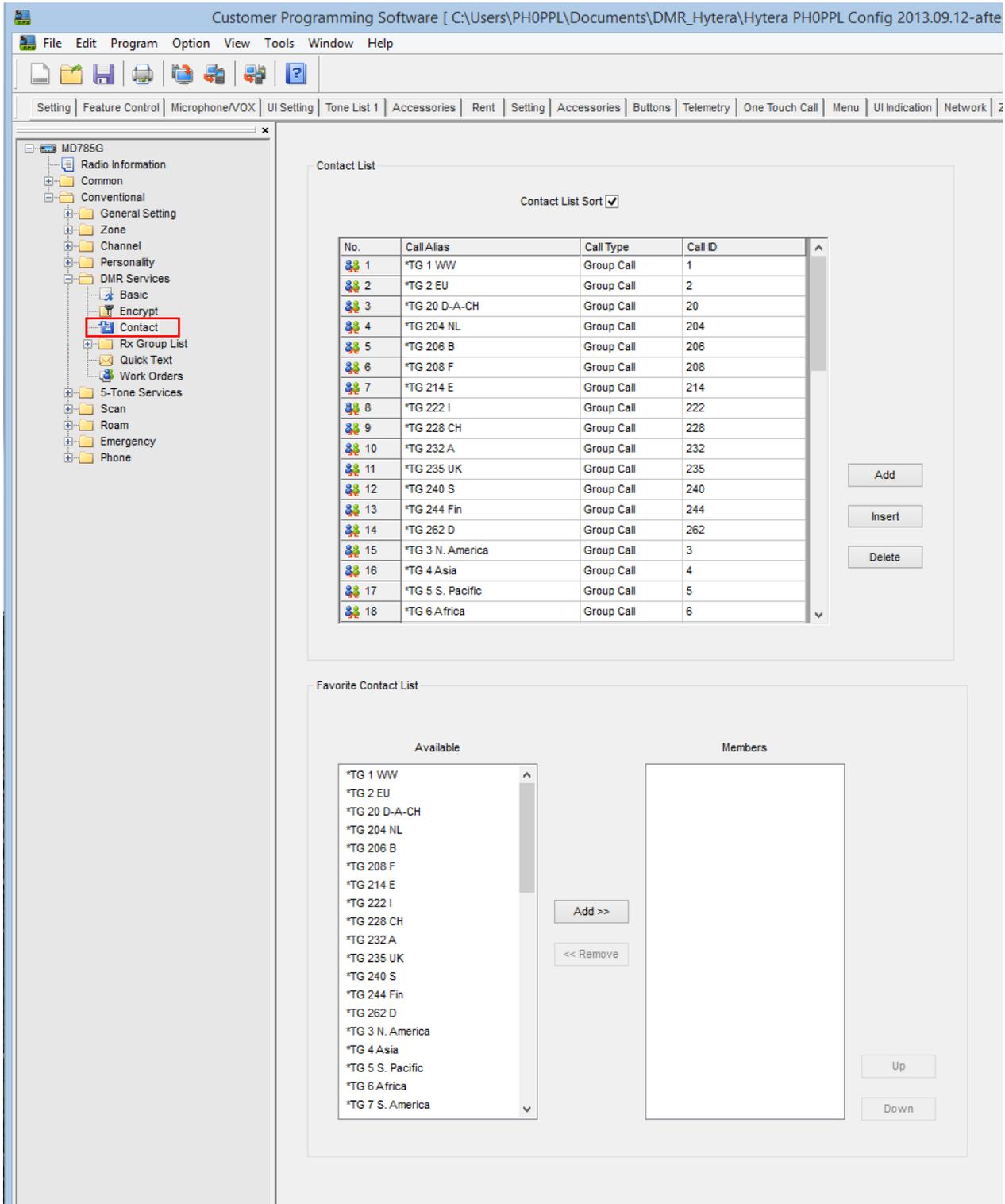


Figure 31 Conventional – DMR Services – Contact (new sw version)

Configure all our talk groups here. This and the previous examples should give you an idea how you can do this, take a close look at the CALL ALIAS in these examples. Both work, its personal taste what suites you the best.

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

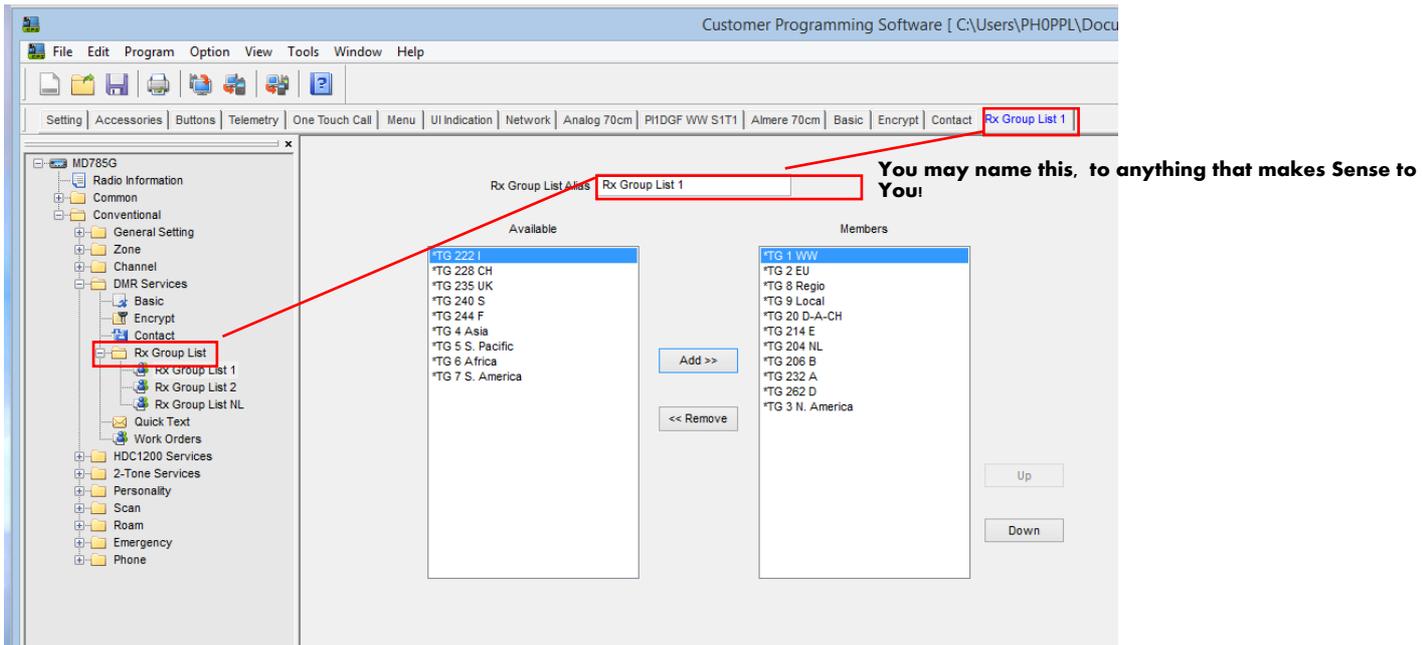


Figure 32 Conventional – DMR Services – RX Group List (example 1)

Take a look at the both examples, its just a matter of personal taste and programming completeness.

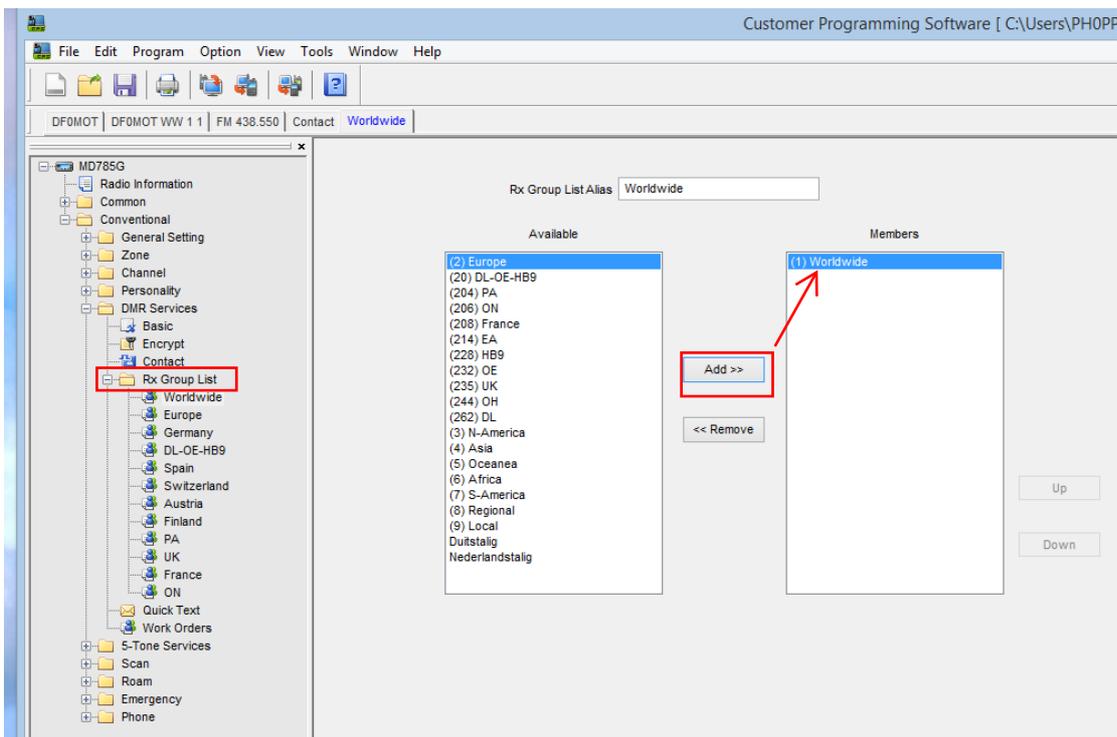


Figure 33 Conventional – DMR Services – RX Group List (example 2)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

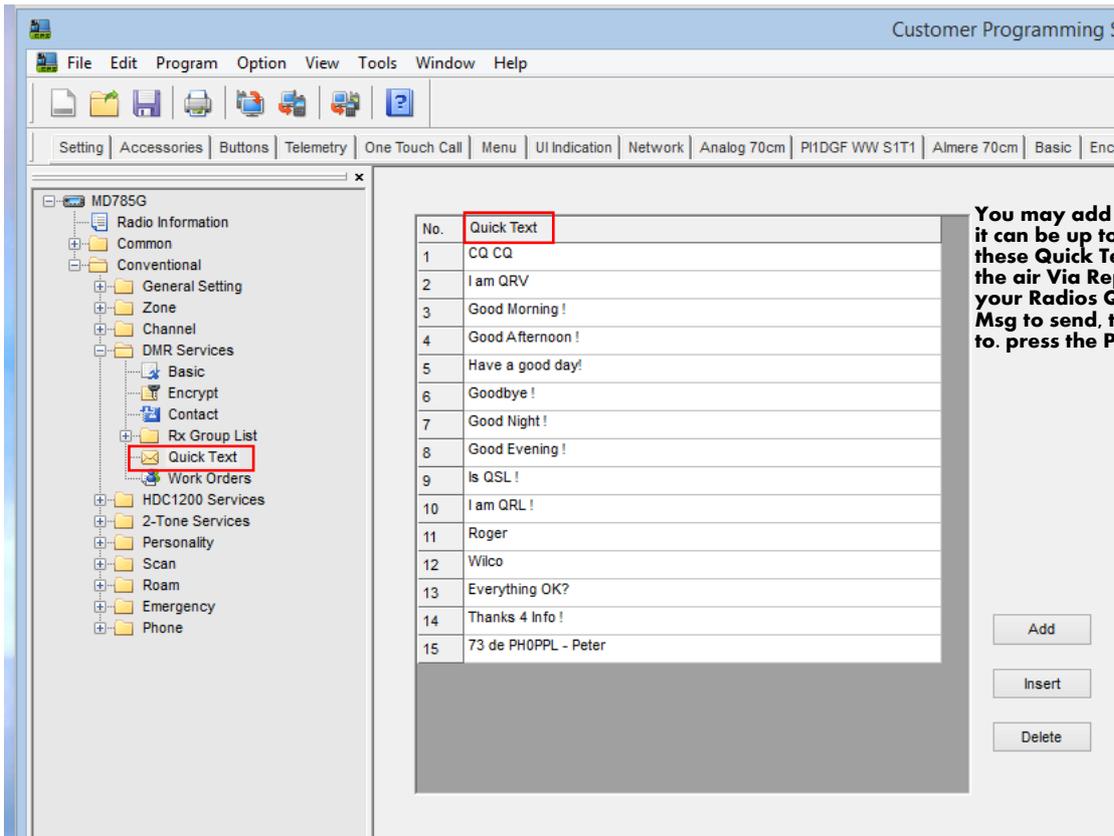


Figure 34 Conventional – DMR Services – Quick Text

I challenge your fantasy ;-)

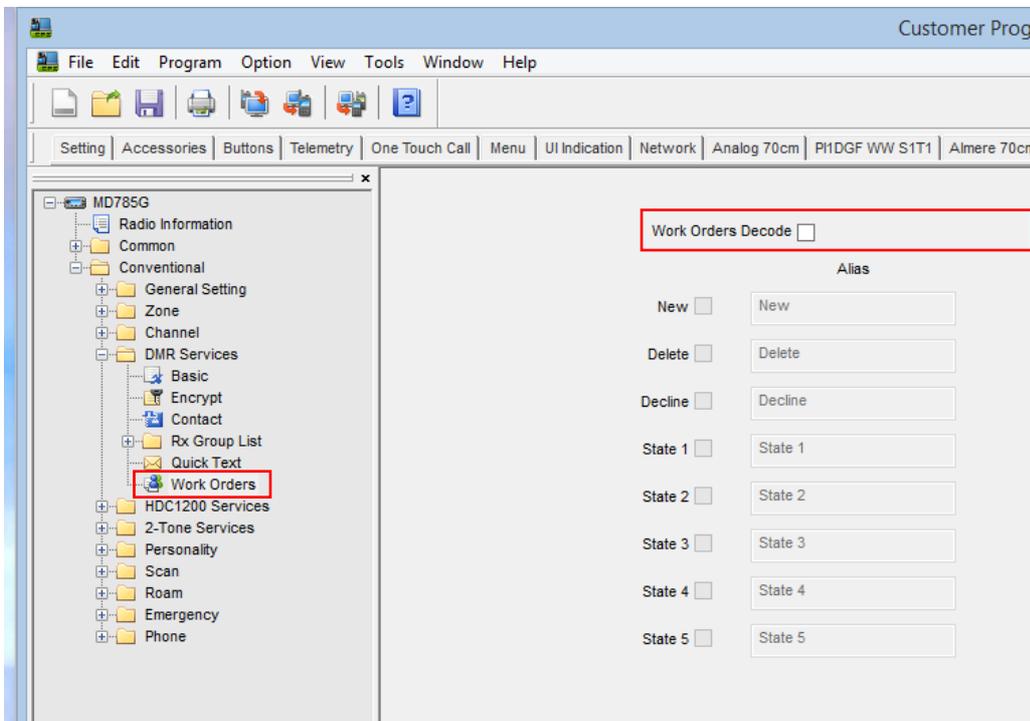


Figure 35 Conventional – DMR Services – Work Orders

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

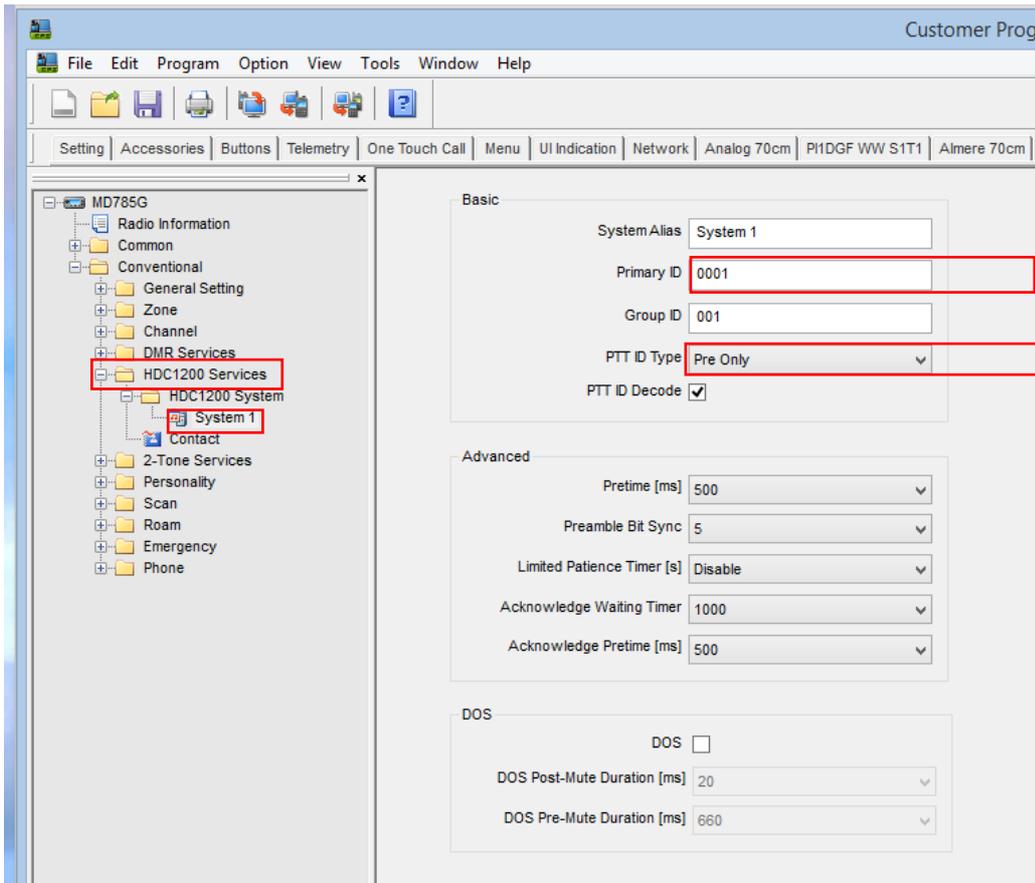


Figure 36 Conventional – HDC1200 Services – System 1

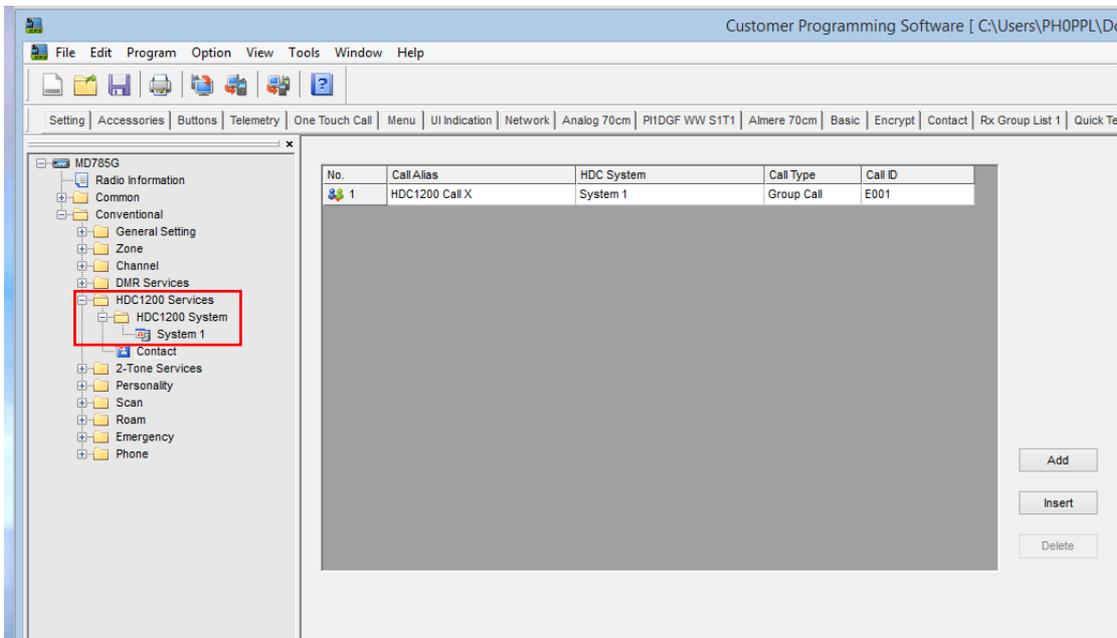
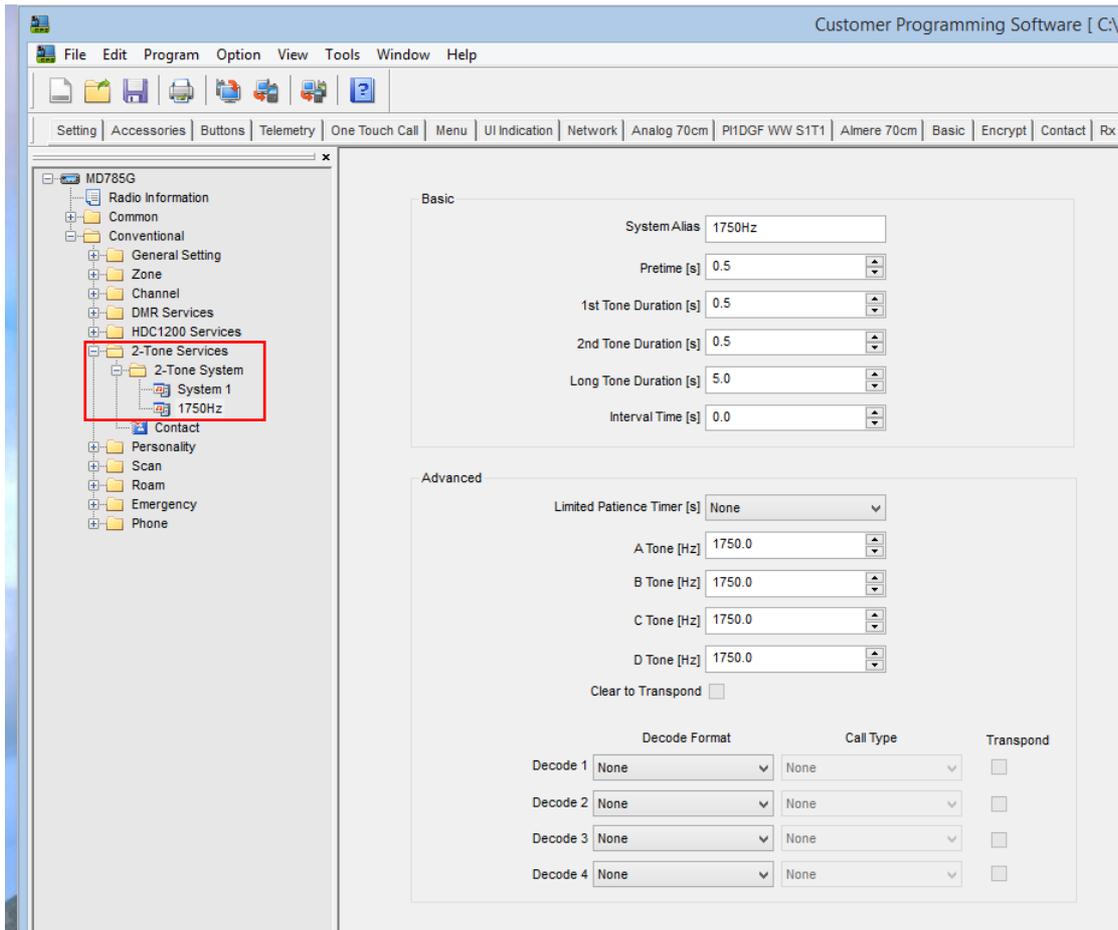


Figure 37 Conventional – HDC1200 Services – Contact

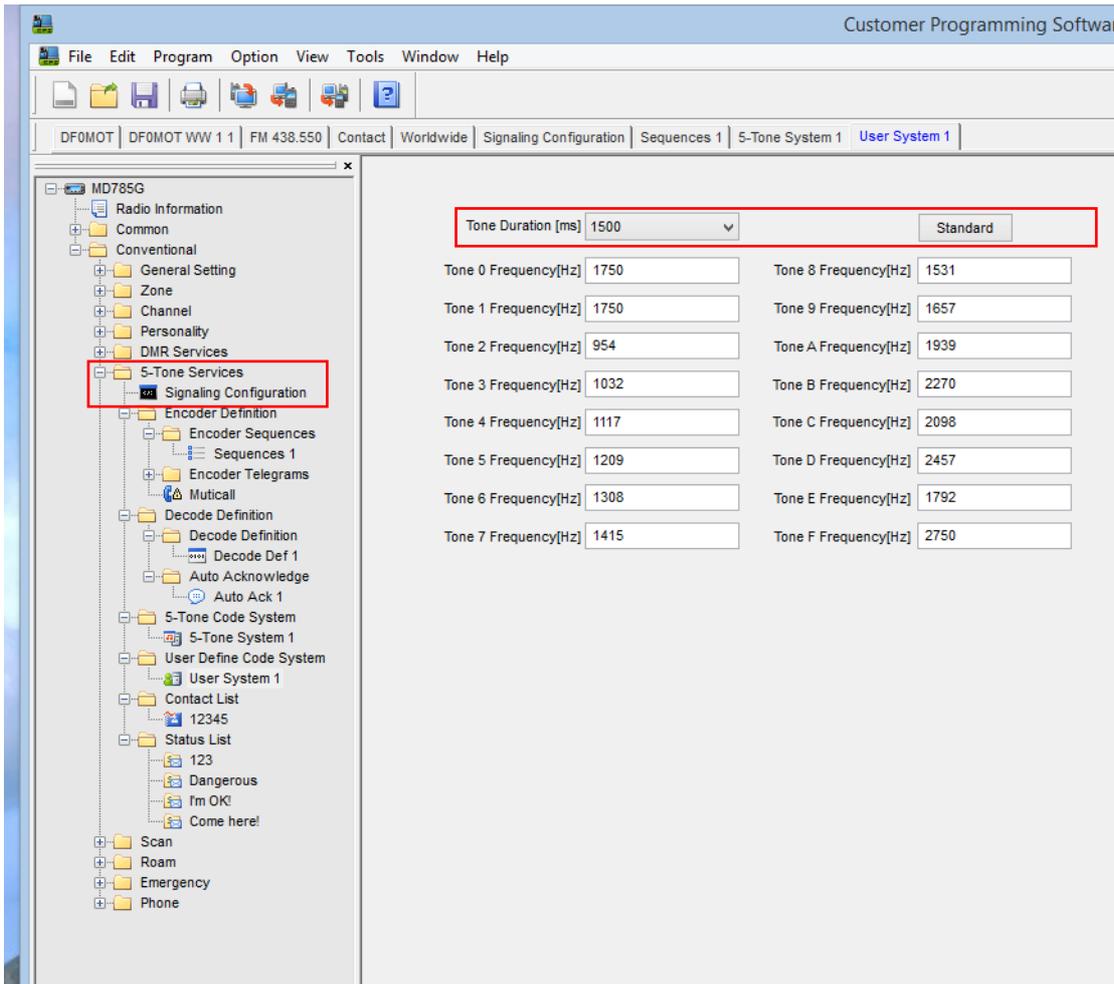
# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)



**2 tone services can be set here choose your appropriate tone and duration criteria.**

Figure 38 Conventional – 2-Tone Services – 1750Hz (example 1)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)



Same Instructions as Above.

Figure 39 Conventional – 5-Tone Services – User System 1 (example 2)

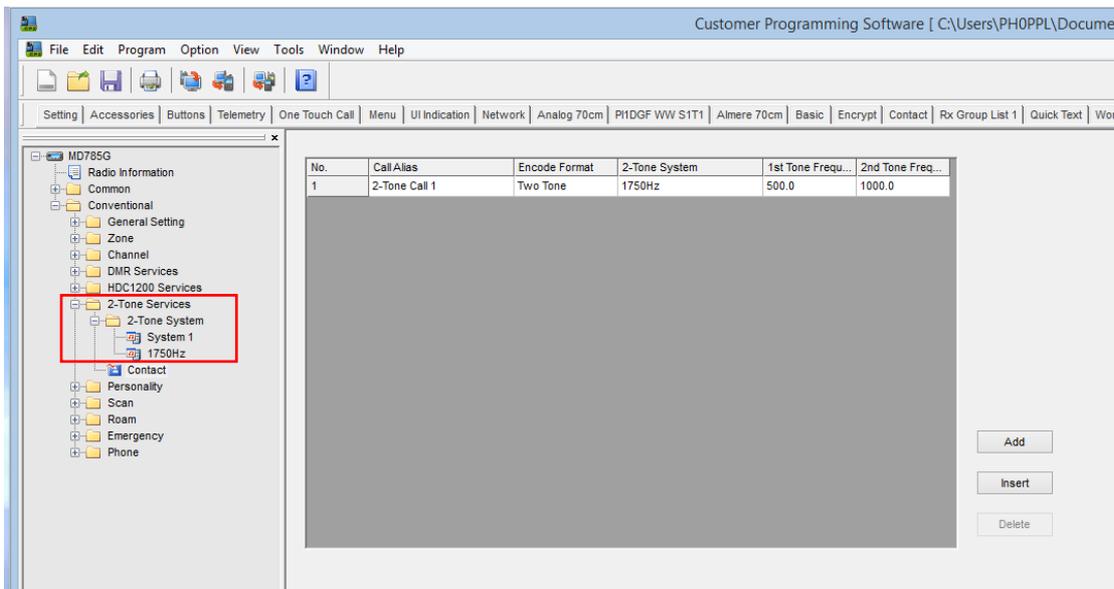


Figure 40 Conventional – 2-Tone Services – Contact

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

CPS version: V5.05.10.002.EM5 (old version)

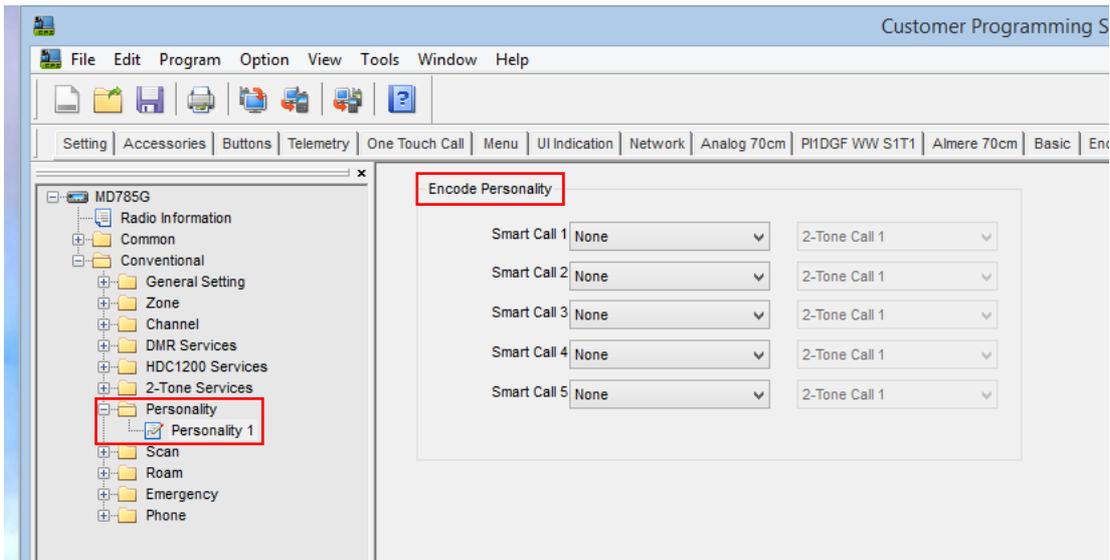


Figure 41 Conventional – Personality – Personality 1 (old sw version)

CPS version: V5.05.13.010.EM5 (new version)

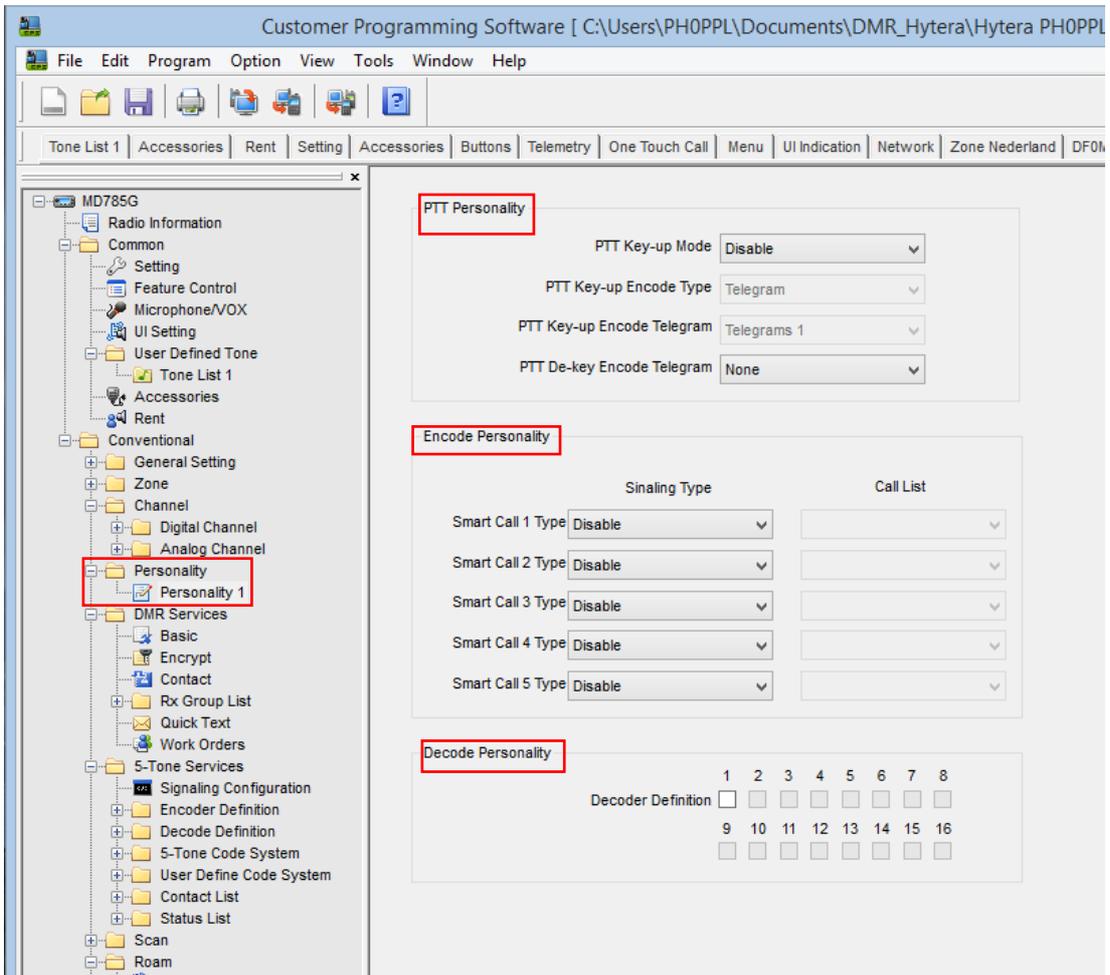


Figure 42 Conventional – Personality – Personality 1 (new sw version)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

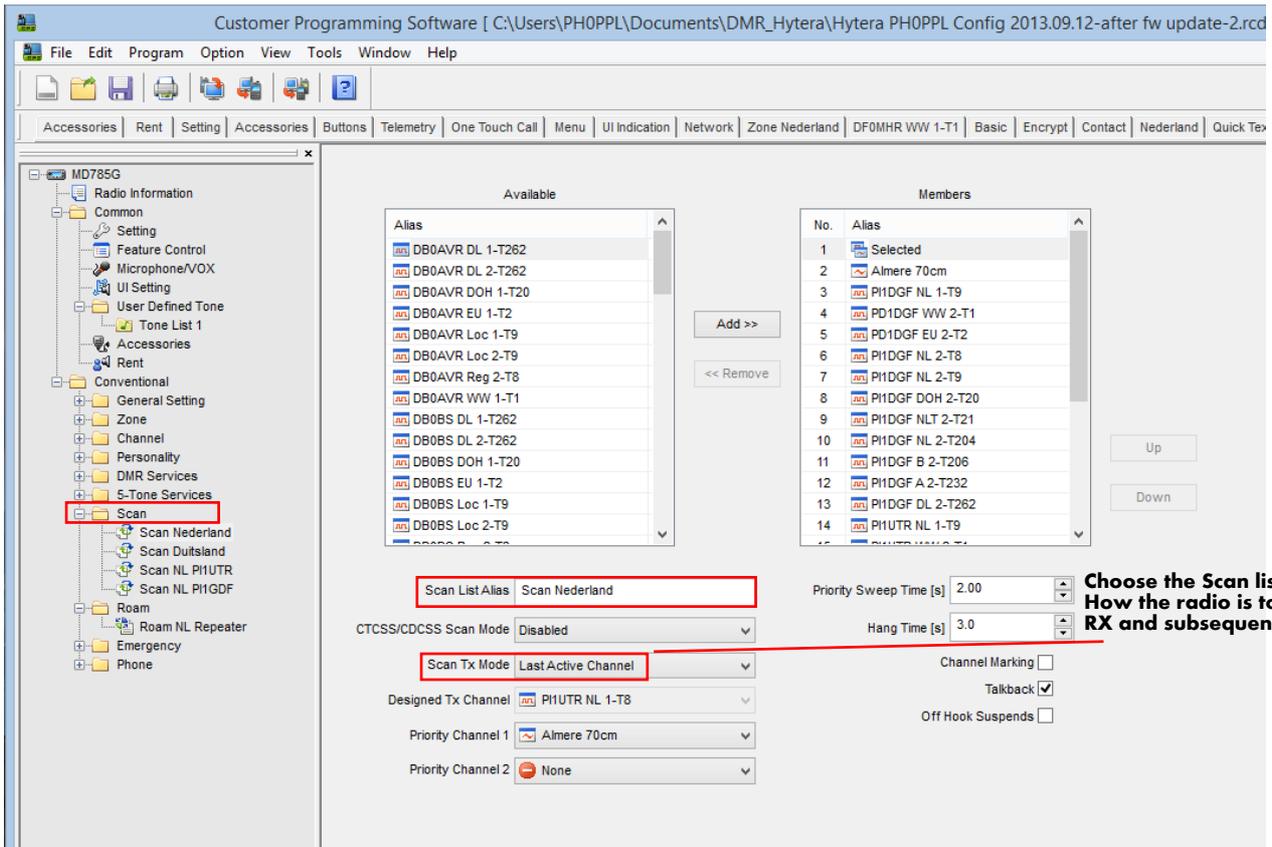


Figure 43 Conventional – Scan – Scan List DMR (example 1)

Here you can configure your scan lists, again two examples both are good.

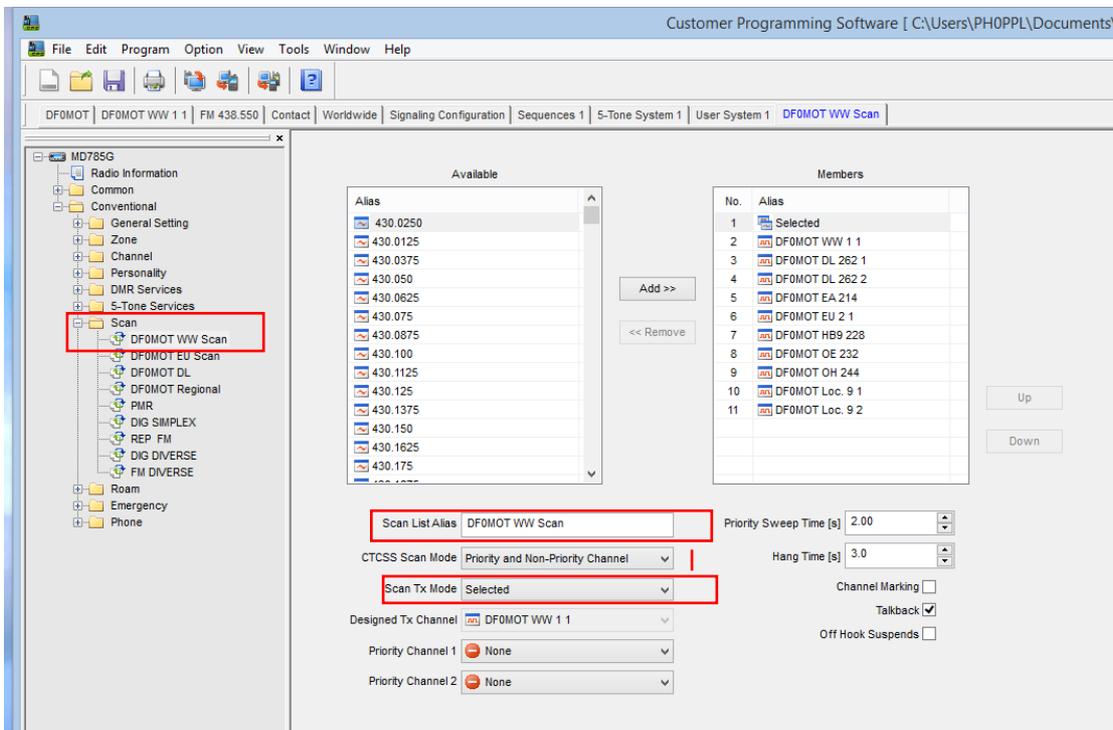


Figure 44 Conventional – Scan – Scan List DMR (example 2)

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

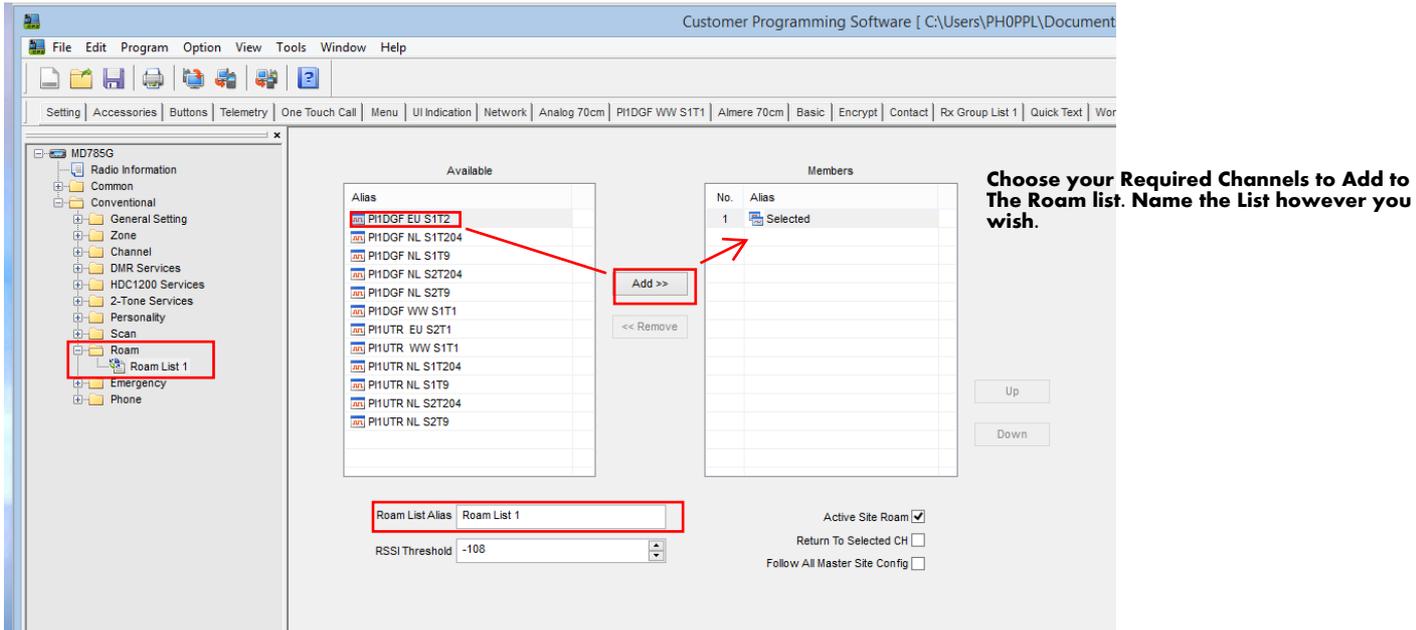


Figure 45 Conventional – Roam – Roam List 1 (example 1)

Just as for scanning you can configure here your roaming lists.

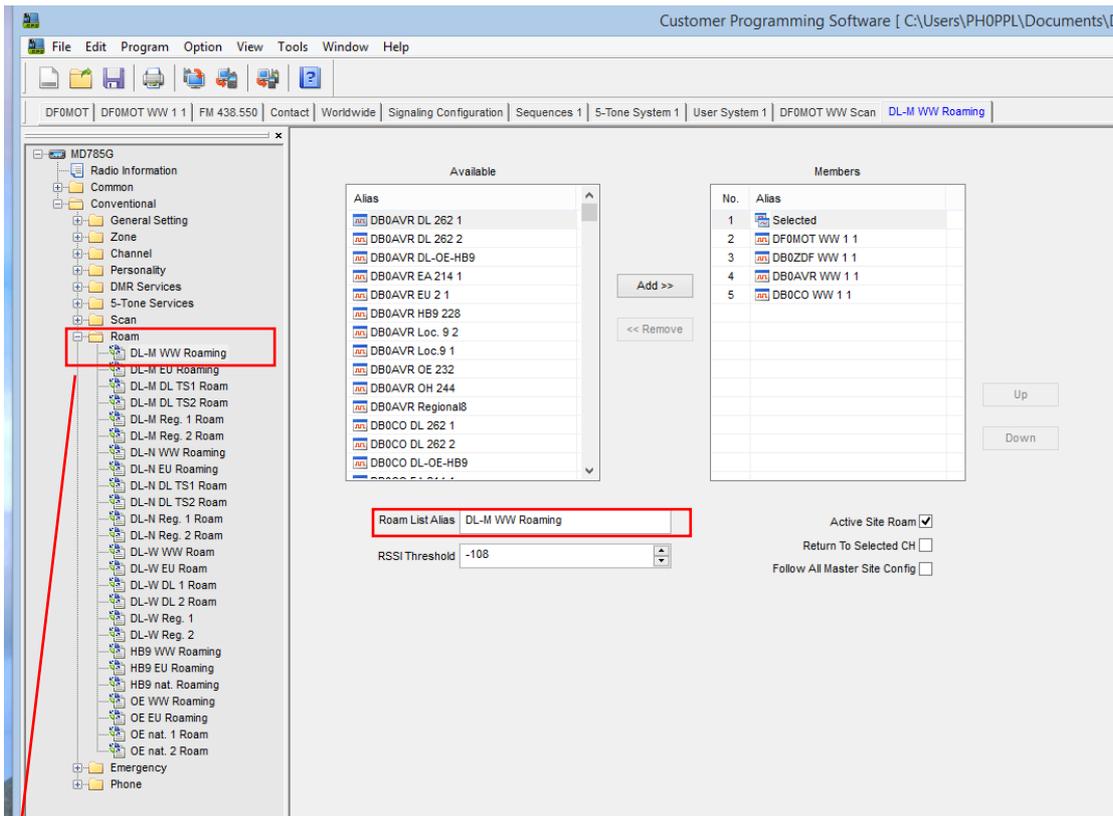


Figure 46 Conventional – Roam – Roam Lists (example 2)

**Note roaming is enabled thru a license, contact you retailer to obtain such license. You can check if roaming is enabled on your radio in the feature control menu, see also Figure 3 Common – Feature Contol.**

**Roaming is now Standard on all Radios being Shipped with SW Version 6.01 .. No Lic is required.**

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

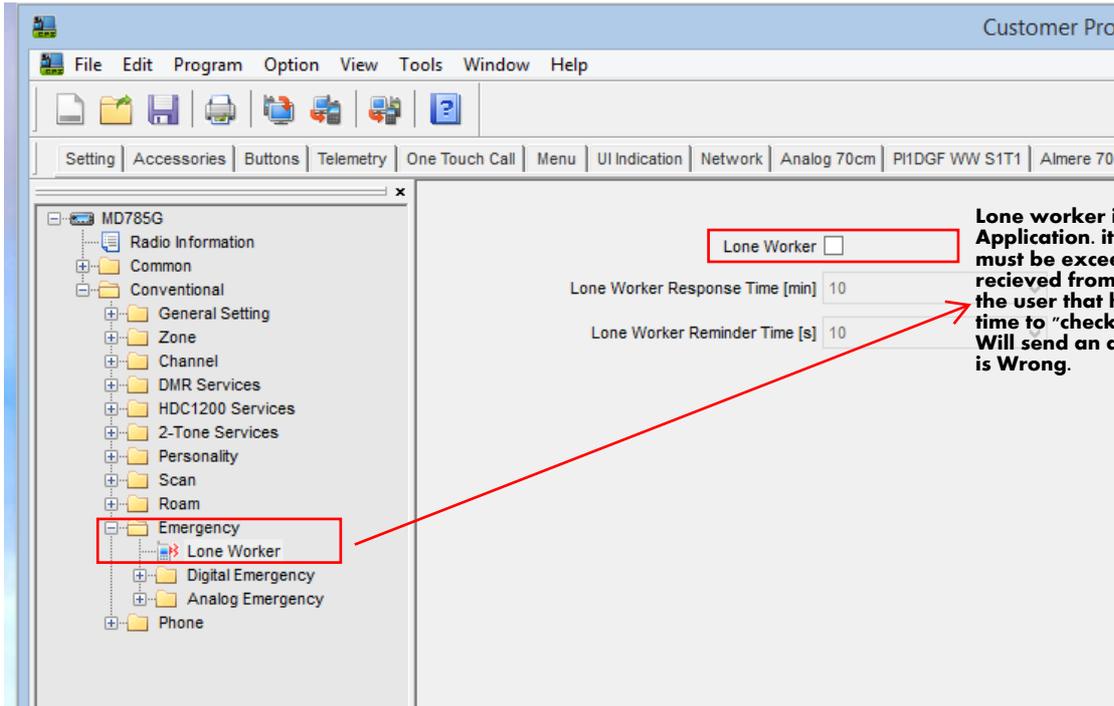


Figure 47 Conventional – Emergency – Lone Worker

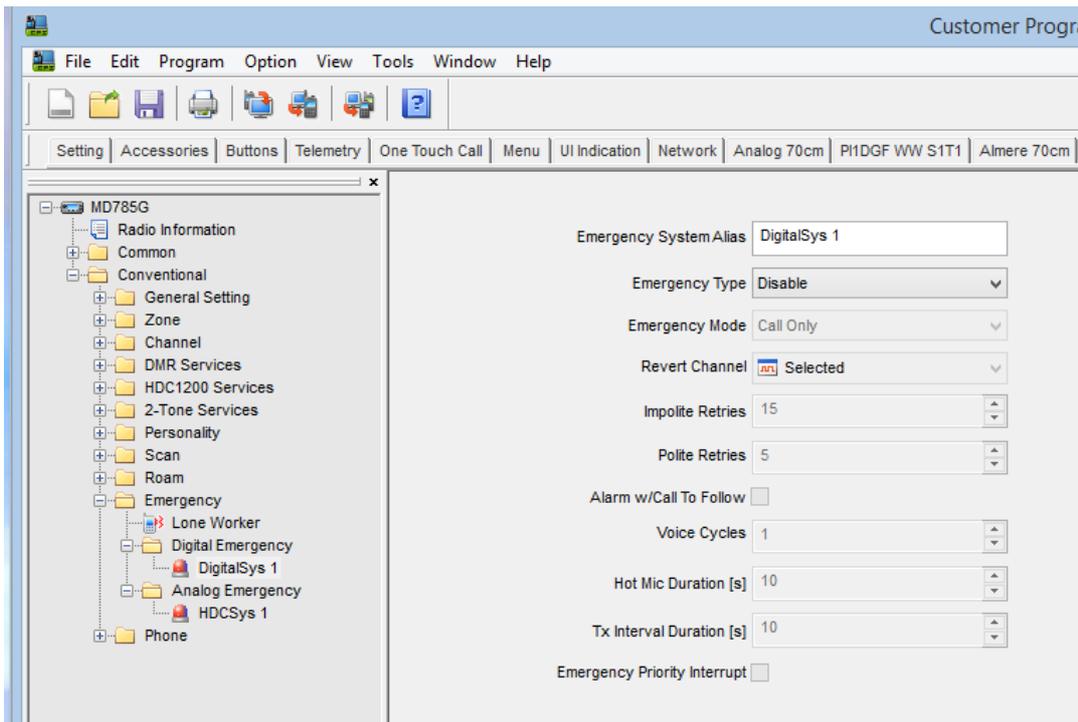


Figure 48 Conventional – Emergency – Digital Emergency

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

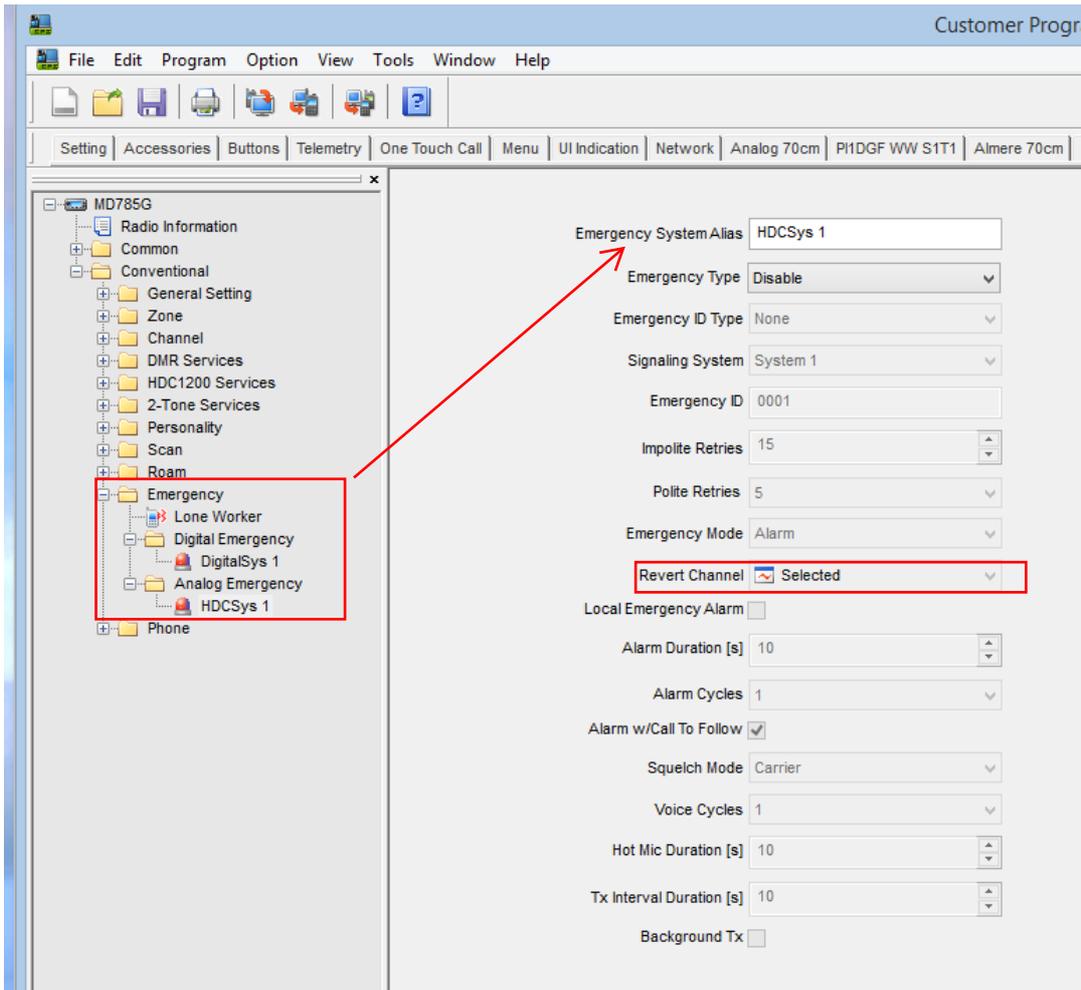


Figure 49 Conventional – Emergency – Analog Emergency

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

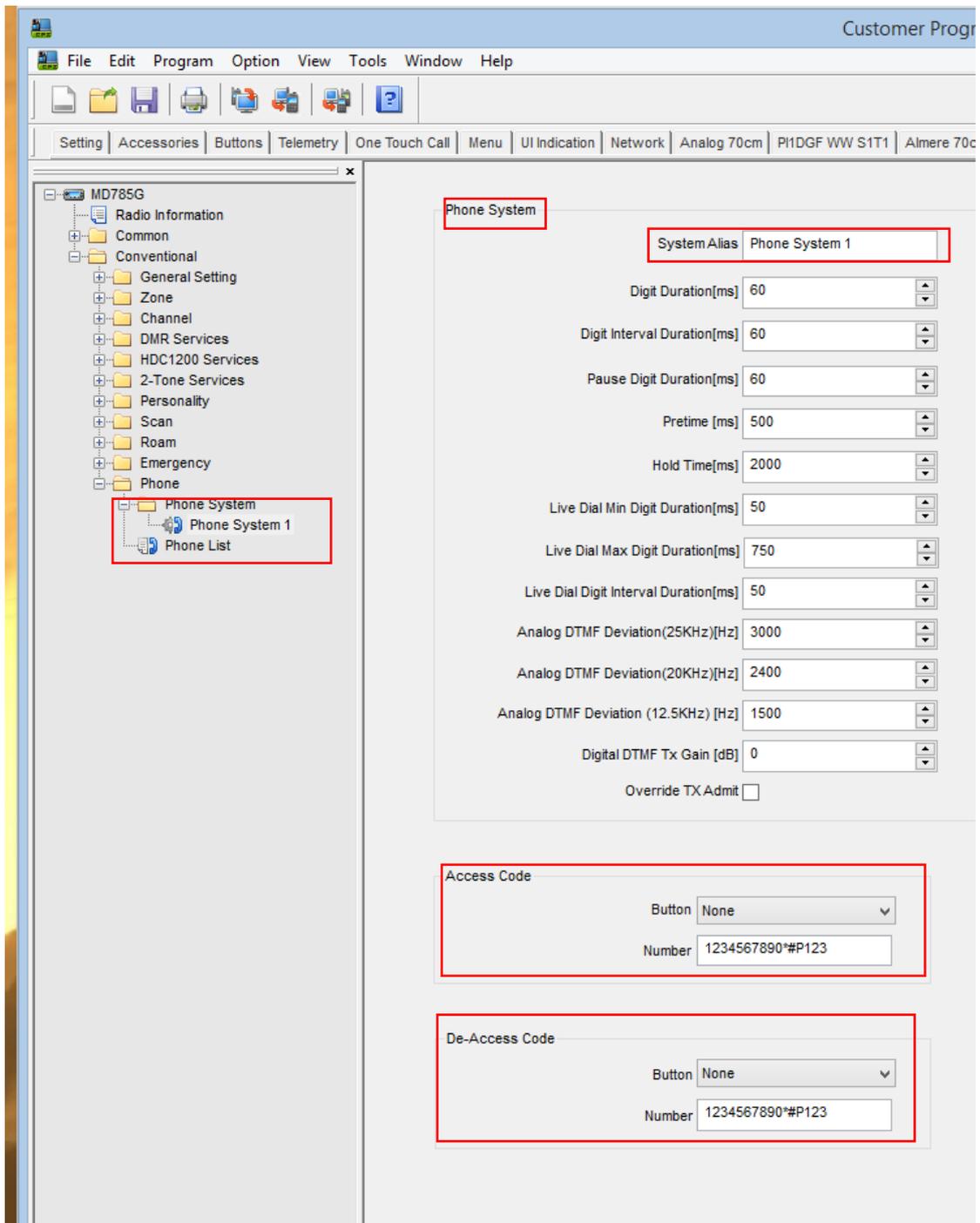


Figure 50 Conventional – Phone – Phone System 1

# HYTERA PROGRAMMING QUICK REFERENCE GUIDE (FOR DMR DUMMIES)

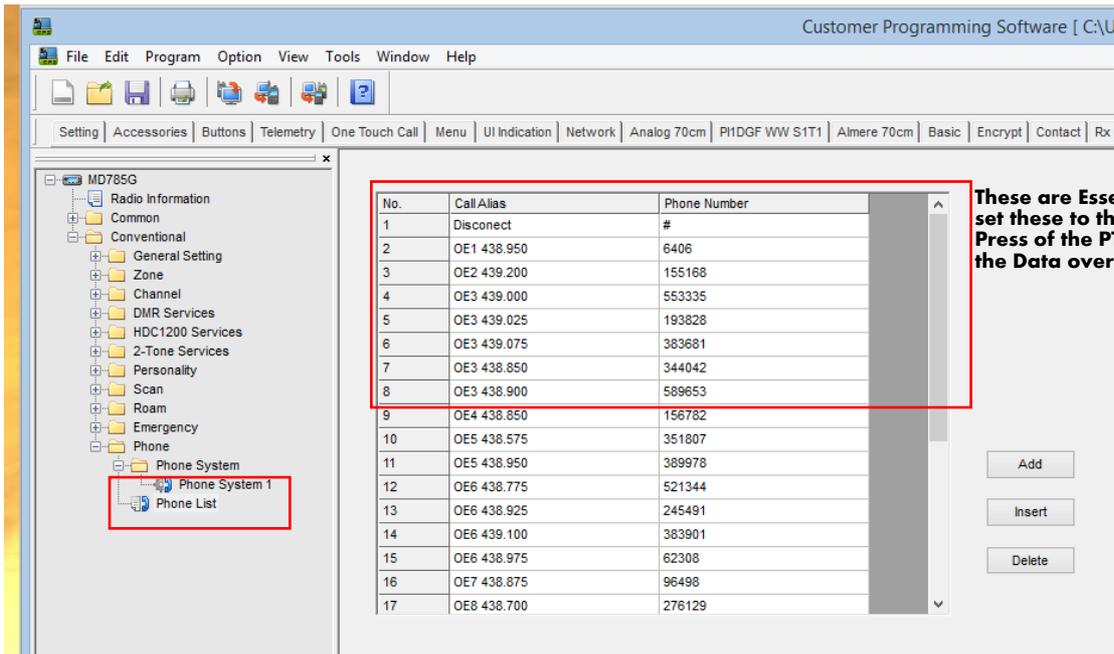


Figure 51 Conventional – Phone – Phone List

## Revision History

v0.1	29-aug-2013	Birth of document
v0.2	08-sept-2013	Figure 16 – RSS and GPS Radio ID should NOT be filled, replaced figure 16
V0.3	09-sept-2013	Figure 16 – RSS and GPS Radio ID should be filled. Leave at its default value of "1".
V0.4	12-sept-2013	Added screenshots to show the both the new functionality as well as the difference between the old and new (V5.05.13.010.EM5) CPS software.