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 Progamming**! 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.

a		Customer Programming Softwar
🟭 File Edit Program Option View To	ols Window Help	
🗋 🖆 🖶 🚭 🖏 🐳	2	
Radio Information		
Radio Information	Serial Number	
Conventional	Model Name	MD785G
	Model Number	MD785-000G0000-001000-U1-L-H
	Model Type	Mobile
	Frequency Range [MHz]	400-470
	Signaling Type	DMR/HDC1200/2-Tone
	Radio Data Version	D5.00.09.000
	Firmware Version	A5.00.15.001
	Last Programmed Date	2013.8.29

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.

				Customer Progra	imming Sc
	🛄 File Edit Program Option View Te	ools Window	Help		
	🗋 🖆 🔚 🌲 🔯	2			
	Radio Information Setting				
	Kommer Control Kommer Control		Basic Radio Alias	1 PHOPPL - Peter	>
	Microphonevox Microphonevox Microphonevox Microphonevox Microphonevox		Squeich Open Level	0 🗸	
	Accessories		Squelch Normal Level	1 🗸	
			Squelch Tight Level	3 🗸	
			Analog Rx Gain [dB]	0.0	
L			Digital Rx Gain [dB]	6.0	
L			Language	English(United States)	
			Channel/Group Notify Language	English 🗸	
L			Password		
			Radio Lock		
8			Radio Password		
			CPS Write Lock		
			Write Password	*****	
			CPS Read Lock		
			Read Password	******	

Figure 2 Common – Settings

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

2		Customer Programm	
🟭 File Edit Program Option View Te	ools Window Help		
📙 🗋 🖶 🖨 🖓	2		
Radio Information Setting Feature Control			
X MD785G Radio Information Common Setting Feature Control Wicrophone/VOX Usetting Usetting Usetting Accessories Rent Conventional	Subscriber Mode Control DMR Trunking MPT Trunking Conventional Analog&Digital Mode Conventional Feature in Subscriber Scrambler Basic Encrypt Full Encrypt-Hytera Full Encrypt-Hytera Full Encrypt-IMRA Roam Priority Interrupt Remote Monitror Common Feature Only Narrow Band Feature Check		Roaming is Standard on all New radios, and wil - 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 Contol

2.		Customer Programming Soft	A
🟭 File Edit Program Option View Tools Window	v Help		
🗅 🖆 🔚 🤤 🦥 🐗 💞 🔳			
Radio Information Setting Feature Control Microphone/VOX	<		
MD785G Common Setting Feature Control Microphone/VOX UI Setting UI Setting Conventional	Microphone Digital Mic AGC Analog Mic AGC Mic Audio Output AGC Dynamic Range Min Value (dB] AGC Dynamic Range Max Value (dB] Internal Mic Gain (dB) External Mic Gain (dB)	✓ ✓ - 10 12 15.0 ★ 16.0 ★	All Factory Settings should be sufficient for normal operations. change is Not Reccomended:
	VOK Internal MIC VOX Gain Level External MIC VOX Gain Level VOX Hold Time [s] VOX MIC Selection	5 3 3.0 Only External v	

Figure 4 Common – Microphone/VOX

2		Customer Programn
腸 File Edit Program Option View To	ols Window Help	
🗅 🖆 🔚 🖨 🖏 🖏 😽	2	
Radio Information Setting Feature Control M	crophone/VOX UI Setting	
× MD785G Radio Information Common Feature Control Microphone/VOX Microphone/VOX User Defined Tone Conventional	Volume Max Volu Min Volu Internal Tone Max Gain [External Tone Max Gain [Always Treble Bo Lu LQO Max Boost Volume[me 8 v me Off v dBJ -21 v dBJ -24 v ost 0 00 0 dBJ 10 ÷
	Backlight Backlight Backlight Time [s]	Timed v 15 ×

Figure 5 Common – UI Setting

File Edit Program Option View Tools	Customer Programm findow Help Alert Tone List Alias Tone Tone Son © 0 1 1 1 1 Alert Tone List Alias Tone List 1 1 1 1 1 1 1 1 0 0 2nd Tone 500 © 0 0 0 3rd Tone 500 © 0 0 0 0 4th Tone 500 © 0 0 0 0 0 5th Tone 500 © 0 0 1 1th Tone 500 © 0 7th Tone 500 © 0 0 1 14th Tone 500 © 0	tion [ms] tion [ms] Use this field to Create Custom Tones Use The Graph and Play Function to hear your Newly Created Tones. Pay Market Stop
		Play Stop

Figure 6 Common – User Defined Ton – Tone List

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

2		Customer Programming
🔚 File Edit Program Option View Tools \	Window Help	
🗅 🖆 🖶 🌐 🐏 🖨 💞 🖻		
Radio Information Setting Feature Control Micropho	one/VOX UI Setting Tone List 1 Accessories	
MD785G Radio Information Common Feature Control Microphone/VOX UI Setting User Defined Tone User Defined Tone Conventional Conventional	Ignition Sense Ignition Sense Type Ignition Off Time Public Address Public Address	Disable Ignition Off

Figure 7 Common – Accessoires (old sw version)

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

2.		Customer	Programming Software - [Accessories]	
🔜 File Edit Program Option View T	ools Window Help			
	2			
Radio Information Setting Feature Control	licrophone/VOX UI Setting Tone List 1	Accessories		
MD785G G G Common	Ignition Sense			
🖉 Setting		Ignition Sense Type	Disable Ignition Off ∨	
Microphone/VOX		Ignition Off Time	00: 00	
End Ser Defined Tone	Public Address			
ন বিদেশ Accessories এর্থ Rent এন্⊡ Conventional		Public Address	Public Address 1	
	Horn & Lights			
		Alarm	Alarm Re-Arm	
		Duration [s]	5	
		Delay Time [s]	7	

Figure 8 Common – Accessoires (new sw version)

2			Customer Programm	ning Sol
🟭 File Edit Program Option View Tools Win	dow Help			
Radio Information Setting Feature Control Microphone/	VOX UI Setting Tone List 1 Acc	essories Rent		
×				
Common	Rent			
& Setting	Rent Time Type	Using Time 🗸 🗸		
	Rent Beginning Date	1- 5-2012	12: 00	h T
User Defined Tone	Rent End Date	4- 5-2012	08: 00	
e Accessories	Rent Days	1		Pent, can be used to shut of
	Rent Hours	0		or otherwise disable a unit
	Rent Minutes	0		to someone after a pre-
	Rent Pre-Alert Time[day]	0		
	Rent Pre-Alert Time[hour]	1		
	Rent Pre-Alert Time[minute]	0		
	Rent Alert Interval Time[hour]	0		
	Rent Alert Interval Time[minute]	10		

Figure 9 Common – Rent

	Customer Prog	rammir
🟭 File Edit Program Option View Tools	Window Help	
	2	
Setting		
×		
MD785G Radio Information	Basic Setting	
termon ⊡ Common		
⊡— Conventional	High Tx Power [W] 30	
- 2 Setting - & Accessories	Low Tx Power [W] 10	
	High Tx Power(900M)[W] 30	
	Low Tx Power(900M)[W] 10	
Ul Indication	CTCSS/CDCSS Deviation(25KHz)[Hz] 700	
terrent Zone ⊕⊆ Channel	CTCSS/CDCSS Deviation(20KHz)[Hz] 550	
	CTCSS/CDCSS Deviation(12.5KHz)[Hz] 400	
	Off Hook Monitor	
terretaria Scan terretaria Scan terretaria Scan		
Emergency	Battery Save	
± Phone	Dattery Save V	
	Dattery Save mode	
	Power Op	
		、 、
	Designated Power-on Zone/Channel	
	Power-on Channel PI1DGF NL S2T204 V	You may wish to have the
	Preset Channel	on to a pre defined Channel,
	Zone Channel 2	And Zone set this here
	Preset Channel1 DMR NL V PI1DGF NL S2T204 V	
	Analog 70cm 🗸 🖂 Almere 70cm 🗸	
	Preset Channel3 None 🗸 🖨 None 🗸	
	Preset Channel4 None V SNone V	

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.

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

	Customer Programming Sof	tware [C:\Us
Edit Program Option View Tools	Window Help	
] 🗅 🖆 🔚 😓 🖄 🔹 🗣 🛙 🖻		
Setting Accessories		
→		
Radio Information	GPIO Pins	
- Conventional	Debounce Duration [ms] 100	
⊘ Setting 	Active Level Feature Debounce	
E Buttons	Pin#3 Low V None V	
Ge One Touch Call 	Pin#5 High v Ext Alarm/Horn & Lights v	Pins located in the DB26 Connector on the Rear of the
Ul Indication	Pin#12 Low v None v V	Mobile and Repeater units.
	Pin#16 Low V Ext Mic PTT V	
	Pin#20 Low V None V	
	Pin#22 Low V None V	
	Pin#23 Low V None V	
	Pins Preview	
	GPS .	
	GPS 🗹	
	Time Zone GMT+2:00 Y	e Offset for your time Zone vs
	Time Zone Set GMT+8:00 V or Kp	IC / GMT time. Set units to Mph h depending on your location.
	Speed Unit Km/h V	
	GPS Update Time [s] 5	
	GPS Trigger	
	Button 🗸	
	Power Off	
	Time Distance	
	Relationship Between Time and Distance $$_{\rm None}$$	
	Report Start Time 0000-00-00 00:00:00	
	Report Stop Time 🔲 0000-00-00 00:00:00	
	Report Interval Time [day] 0 🗼 [hour] 0 🗼 [minute] 1 🜲 [second]	0
	Report Interval Distance[m] 100	
	The Longest Report Time[day] 0 🖕 [hour] 1 🖕 [minute] 0 🖕 [second]	0
	Horn & Lights	
	Alarm Alarm Re-Arm	
	Duration[s] 5	
	Delay Time[s] 7	

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

5			Customer Programm	ina S	Software - [Access	ories]
📲 File Edit Program Option View Tools	Window Help					,
	1					
Radio Information Setting Feature Control Micro	phone/VOX UI Setting	Tone List 1 Accessor	ies Rent Setting Acces	ssories	5	
×						
Radio Information	GPIO Pins					
Common Conventional		Data Revert Chan	nel Nelected	¥		
General Setting		Debourse Duration (n				
		Deboance Daration (in		•		
Buttons		Active Level	Feature		Debounce	
Telemetry Telemetry Telemetry Telemetry	Pin#3	Low Y	None	¥		
Menu		Low To Web	None			
		Low to High	none	~		
⊕ Zone ⊕ Channel		High To Low	None	~		
Personality	Pin#5	High 🗸	Ext Alarm/Horn & Lights	~	•	
DMR Services S-Tone Services		Low To High	None	\vee		
Boam		High To Low	None			
Emergency	Dia#12					
i → Phone	P11#12	Low Y	None	~		
		Low To High	None	\vee		
		High To Low	None	\sim		
	Pin#16	Low v	Ext Mic PTT	~	~	
		Low To High	None			
		Low for high	None			
		High To Low	None	~		
	Pin#20	Low 🗸	None	~		
		Low To High	None	~		
		High To Low	None	~		
	Dia#22					
	F##22	Low	None	~	_ ⊻	
		Low To High	None	\vee		
		High To Low	None	\sim		Clicking this box will show a
	Pin#23	Low Y	None	¥	•	Connector and it's pinouts.
		Low To High	None	U		
		Low to High		-		
		High To Low	None	Y		
		Pins Preview				
			-			

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

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

Emergency		
	GPS	
	GPS Data Compression	
	Time Zone	GMT+2:00 ¥
	Time Zone Set	GMT+8:00 V
	Speed Unit	Km/h v
	GPS Update Time [s]	5
	GPS Trigger	
	Button	✓
	Power On	
	Power Off	
	Time	
	Distance	
	Relationship Between Time and Distance	None v
	Report Start Time	0000-00-00 00:00:00
	Report Stop Time	0000-00-00 00:00:00
	Report Interval Time [day]	0 + [hour] 0 + [minute] 1 + [second] 0 +
	Report Interval Distance[m]	100
	The Longest Report Time[day]	0 * [hour] 1 * [minute] 0 * [second] 0 *
	Quick GPS	
	Quick GPS	
	Time Synchronization Mode	GPS UART V
	Report Interval Time[s]	60 🗸
	Report Step[ms]	480
	Report Order	1 Aax value is 112
	Percentage of Channel Loading	90% 🗸
	Report Start Time	0000-00-00 00:00:00
	Report Stop Time	0000-00-00 00:00:00
	Close Print Help	
× Edite Commenti a la Caracita di		
	1 <u>g</u> - Accessories	
Create a new document		MD785G

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

2		Cust	omer Programming S	Software - [But	tons]	
🟭 File Edit Program Option View To	ools Window Help					
🗅 🖆 🖶 🍮 🖏 🏘 🐺	2					
Radio Information Setting Feature Control N	licrophone/VOX UI Set	ting Tone List 1 Accessories Rer	nt Setting Accessories	Buttons		
X						
MD785G Radio Information Common	TK Short	Scan v	TK Long	GPS Report		~
Conventional	P1 Short	Preset Channel 1 🗸 🗸	P1 Long	Talk Around		*
Setting	P2 Short	Preset Channel 2 v	P2 Long	Squelch Off		~
Buttons	P3 Short	Preset Channel 3 v	P3 Long	Message		~
Ge One Touch Call	P4 Short	Preset Channel 4	P4 Long	DTMF Keypad		~
	P5 Short	Zone Down 🗸	P5 Long	Contact List		*
	P6 Short	Zone Up 🗸 🗸	P6 Long	Call log		~
	ACC P1 Short	Squelch Off v	ACC P1 Long	Adjust Squelch Lev	/el	~
DMR Services	ACC P2 Short	Contact List v	ACC P2 Long	Call log		~
	ACC TK Short	Scan v	ACC Tk Long	GPS Report		*
⊕ Emergency ⊕ Phone			Long	Press Duration [s]	2.0	•
			Long Press Duration for	Emergency Off [s]	2.0	▲ ▼
			Default Nun	neric Key Selection	Enable	~
				Button Preview]	

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.

2	Customer Programming Software [C\Users\PH0PPL\Documents\DMR_Hytera\Hytera PH0PPL Config 2013.08.29.rcd] - [Telk									
🔠 File Edit Progra	a File Edit Program Option View Tools Window Help									
Setting Accessories	Buttons Telemetry									
	×									
Common	stion	No.	Feature	Description	Action	Pulse Time[ms]	Digital Call	Target VIO	Quick Text	1
Conventional	Setting	1	Telemetry Button1	Button1	None	200	None	None	None	
- 🖉 Settir	19	2	Telemetry Button2	Button2	None	200	None	None	None	
- We Acce	ssories ns	3	Telemetry Button3	Button3	None	200	None	None	None	
	netry	4	Telemetry VI01	Telemetry/VIO1	None	200	None	None	None	
	Iouch Call	5	Telemetry VI02	Telemetry/VIO2	None	200	None	None	None	
👍 UI Ind	ication	6	Telemetry VI03	TelemetryVI03	None	200	None	None	None	
. Zone	ork	7	Telemetry VIO4	Telemetry/VIO4	None	200	None	None	None	
Channel DMP Sec	lines	8	Telemetry VI05	Telemetry/VIO5	None	200	None	None	None	
0-0 HDC1200	Services	9	Telemetry VI06	Telemetry/VIO6	None	200	None	None	None	
2-Tone S Dersonal	ervices ty									
B Scan										
0-0 Emergen	5y									
🗄 🦳 Phone										

Figure 14 Conventional – General Setting – Telemetry

				Customer Progra	amming Software [C:\Users	\PH0PPL\Documents
JFile Edit Program Option View	Tools Window Help					
🗋 🖆 🗐 🖨 🗟	¥ 2					
Setting Accessories Buttons Telemetry	One Touch Call					
	×					
Radio Information	No.	Call Mode	Call List	Call Type	Quick Text	
Conventional	One Touch Call1	Analog	Smart Call 1	None	None	
General Setting	One Touch Call2	None	None	None	None	
Accessories	One Touch Call3	None	None	None	None	
Buttons Telemetry	One Touch Call4	None	None	None	None	
🕼 One Touch Call	One Touch Call5	None	None	None	None	
- Menu - Cal UI Indication	Numeric Key1	None	None	None	None	
	Numeric Key2	None	None	None	None	
'≞'⊶ ∠one '⊞⊶ Channel	Numeric Key3	None	None	None	None	
DMR Services	Numeric Key4	None	None	None	None	
HDC1200 Services 2-Tone Services	Numeric Key5	None	None	None	None	
Personality	Numeric Key6	None	None	None	None	
e Roam	Numeric Key7	None	None	None	None	
Emergency	Numeric Key8	None	None	None	None	
English Filone	Numeric Key9	None	None	None	None	
	Numeric Key0	None	None	None	None	
	Numeric Key*	None	None	None	None	_
	Numeric Key#	None	None	None	None	_
						_

Figure 15 Conventional – General Setting – One Touch Call



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

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

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

E Custom	er Programming Software [C:\Us	ers\PH0PPL\Documents\DM	IR_Hytera∖Hytera PH0PPL Conf	
File Edit Program Option View T	ools Window Help			
	2			
Feature Control Microphone/VOX UI Setting	Tone List 1 Accessories Rent Setting	g Accessories Buttons Telemetry	y One Touch Call Menu UI Indication	
× MD785G	Menu Reset Time [s]	10 🗸		
Radio Information	Common Menu	Digital Menu	Analog Menu	
⊡ Common	✓ Settings	Contact	Contact	
	Audio Settinos	Favorite Contact	Contact List	
Microphone/VOX	Mic AGC	Contact List	Manual Dial	
User Defined Tone	Always Treble Boost	Private Call Contact	☑ Status	
Tone List 1		Group Call Contact	Status List	
e Accessories ≪ Rent	Radio Settinos	Edit Contact	Manual Dial	
Conventional	Talk Around	Delete Contact		
Erre General Setting	Power Level	View Contact		
Accessories	Squeich Level	New Contact	Missed	
Buttons	Rent	Manual Dial		
Ge One Touch Call	Scrambler	Private Call Manual D	lial	
Menu		Group Call Manual Di	ial	
UI Indication		Ctrl Services	This Entire section is where you w	vill sotun
		Alert Call	the Available Menu functions. che	eck or
Zone Nederland		Radio Check	Un Check the box to make the fu	nction the user.
Zone Analog 70cm		Perste Monitor		
Zone Aachen		Remote monitor Padio Enable		
Zone Bochum		Radio Enable		
Zone Dortmund				
Zone DL Ruhr Loc		Messaye		
Digital Channel		V New Msg		
PI1DGF WW 1-T1	New Encrypt Key			
PI1DGF EU 1-T2		M Dools		
In PI1DGF NL 1-T8		✓ Reply		
PI1DGF NL 1-T9		rorward		
PD1DGF WW 2-11	Uption Board			
PI1DGF NL 2-T8	Device Information	✓ Drafts		
PI1DGF NL 2-T9	∠one	Call Logs		
PI1DGF NLT 2-T21	l Scan	✓ Outgoing		
	Scan On/Off			
PIDGF B 2-1206	Scan List	Missed		
PI1DGF DL 2-T262				
PI1UTR WW 1-T1	GPS			
	GPS On/Off			
PI1UTR NL 1-T8	Time Zone		/	
PIUTR WW 2-T1	Position View			
PI1UTR EU 2-T2	GPS Msg			
PI1UTR NL 2-T8	Horn & Lights			
PI1UTR DOH 2-T20	Roam			
PIUTR NLT 2-T21	Roam On/Off			
PIUTR 8 2-1204	Roam List			
	✓ Phone	/		
		V		

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.

Programming					
Channel					
✓ Frequency					
Slot					
Color Code					
✓ CTCSS/CDCSS					
✓ Tx Contact Name					
Rx Group List					
Radio					
Radio Alias					
Radio D					
Close Print Help					
Edit - Conventional - General Setting - Menu - Common Menu - Programming					
Create a new document	MD785G				

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

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

2			(Customer Pr	ogra	mming So	ftwar	e [C:\Users\PH
🔜 File Edit Program Option View To	ools Window Help							
🗋 🖆 🔚 😂 🖏 🐳	2							
Setting Accessories Buttons Telemetry C	One Touch Call Menu UI Indication							
Radio Information ⊕	Tone Alerts	Г				1		
Conventional		Radio Silent	Silent C	Off	¥			
Setting		Talk Permit Tone	Enable		¥	1		~
Buttons		Call End Tone	1		V			
One Touch Call		Private Tone	1		V			
·····································	Te	xt Message Tone 🔽	2		¥]		
t⊶ajii Network ⊕⊶⊡ Zone		Keypad Tone 🗸	1		v]		
⊕⊶i Channel ⊕⊶i DMR Services		Group Call Tone 🗸	1		¥]		
HDC1200 Services	Sij	gnaling Side Tone 🗌	1		~]		
		Voice End Tone	1		~			
Roam		Alert Call Tone 🗸	1			1		
	Emerg	ency Alarm Tone	1			1		
	-	Power Up Tone 🗸	1			1		
		/ork Orders Tone	4		*	1		
	Scan Dria	rity Channel Tone	1		~			
	Stair Più	Channel Notify	1		Ý			
	Emergenc	y Siren Tone Volume	1		¥			
		Others Tone Volume	1		¥			
	Digital Talk Permit	Tone Delay Time[ms]	0		•			
	Analog Talk Permit T	one Delay Time [ms]	0		•			
	Alex Trace Cotting							
	Alert ToneSetting	Alert Tone List		Cycles	Int	terval Time [m:	s]	
	Private Call Tone	Default	~	1	* 1	000	A V	
	Group Call Tone	Default	¥	1	1 *	000	A V	
	Text Message Tone	Default	~	1	* 1 *	000	A V	
	Alert Call Tone	Default	~	Infinite	* 1	000	*	
	Emergency Alarm Tone	Default	~	Infinite	* 1	000	*	
	Power Up Tone	Default	~	1	* 1 *	000	A V	
	Work Orders Tone	Default	~	1	* 1 *	000	*	
	LED	EDs 🗸						
	Tx	LED 🗸						
	Rx	LED 🖌						
	Scan/Roam	LED 🔽						

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**.

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

		Customer Pro	ogramm
🔚 File Edit Program Option View To	ols Window Help		
	2		
Setting Accessories Buttons Telemetry 0	ne Touch Call Menu UI Indication Network		
× MD785G Radio Information Common Conventional General Setting Accessories Buttons Telemetry Cone Touch Call Menu Curl Ul Indication Network Channel DMR Services	Radio to PC Network Radio Control Station IP PC IP Netmask Forward To PC Radio to Radio Network Radio IP	192 . 168 . 10 . 1 192.168.10.2 255.255.255.0	
HDC1200 Services	Subnet	10	
	Netmask	255.0.0.0	
Roam	Human		
+ Phone	Radio Services	1	
	RRS & GPS Radio ID	1	>
	RRS & GPS Radio IP	10.31.60.28	
	RRS Port	3002	
	GPS Port	3003	
	TMS Port	3004	
	Call Control Port	3005	
	Telemetry Port	3006	
	Beacon Interval[s]	60 •	
	Data Transfer Port	3007	
	RRS Service		
	RRS Delay Registration Time[s]	30	
	RRS Registration Retry Counter	60	
	RRS Registration Retry Interval[s]	30	
Figure 19 Conve	ntional – General Setting – I	Network (old sw ve	rsion

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

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



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



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.



Figure 22 Conventional – Zone (example 2)



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.



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.

Qva) #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.

2			(Customer	Programming Softw	ware [C:\Users\PH0PP	L\Documents\DMR_H
🔜 File Edit Program Option View To	ools Window Help						
🗋 🖆 🔚 😂 🦥 🍓 💞	2						
DF0MOT DF0MOT WW 1 1							
×							
Zone A							
🚊 🗁 Digital Channel		Cha	innelAlias	DPOMOTIVV	(1	i ne actual display may change	, See the Help for details)
DF0MOT WW 1 1		c	olor Code	1			
DF0MOT EU 2 1							
DF0MOT DL 262 1		Slot	Operation	Slot 1	~		
DF0MOT Loc. 9 1		Pseudo Trunk Desi	gnated TX	None	v		
DF0MOT DL-OE-HB9				_			
DF0MOT Loc. 9 2		Scan List/	Roam List	OF DFOMOT	WW Scan 🗸		
DEDMOT HB9 228		Auto S	Start Scan [
DF0MOT OE 232		Та	alk Around	v			
DF0MOT Regional			Px Only	_			
DF0MOT OH 244		10 March - 1	- One only [-			
AL DMR 1 430.050		IP MUID-SIC	e Connect [V			
DMR 3 430.075		Auto S	Start Roam				
			vox [
		Op	tion Board				
		Priority Interru	pt Encode				
- AN DMR 7 430.125		Driarity Interru	nt Docodo				
DMR 9 430.150		Phoney Interru	pr Decode [
		Rx	Offs	et [MHz]		Tx	
	Receive Frequency [MHz]	438.200000	7 60000	0	Transmit Frequency [M	Hz] 430.600000	
DMR 13 430.200	Rx Group List	Worldwide 🗸	C	Сору	Tx Contact Na	ame 🞎 (1) Worldwide	~
DMR 15 430.225	Emergency Alarm Indication				GPS Revert Char	nnel m None	~
	Emergency Alarm Ack						
	Emergency Call Indication				RRS Revert Char	nnel 🔤 None	*
MR 18 434.200	geney car indication				Emergency Sys	tem DmrSys 1	~
DMR 20 434.225	Encrypt						
DMR 21 434.2375					Phone Sys	tem None	~
	Encrypt				Power Le	evel High	~
- AR DMR 23 434.2625	Encrypt Type	Basic v					
DMR 25 434.275					TxAd	dmit Color Code Free	~
- DMR 26 434.300	Encrypt Key	None v			In Call TX A	dmit Follow TX Admit	~
DMR 27 434.750	MultiKey Decrypt						
					Tx Time-out Time	e [s] 180	¥
					TOT Pre-Alert Time	fel 3	
DMR 31 434.850					ion no solution		
					TOT Re-key Time	e [s] 0	*
DB0AVR WW 1 1						-	
DB0AVR EU 2 1					TOT Reset Time	e [s] 0	
DB0AVR DL 262 1					Private Call Confirm	med	
DB0AVR Loc.9 1							
DB0AVR Loc. 9 2							
DB0AVR Regional8							

Figure 25 Conventional – Channel (example 2)

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), 204XYYY.

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

Customer	Programming Software [C:\Users\PH0PPL\Documents\DMR_Hytera\Hytera PH0PPL Config 2
File Edit Program Option View 1808	
Radio Information Setting Feature Control Micro	pphone/VOX UI Setting Tone List 1 Accessories Rent Setting Accessories Buttons Telemetry One Touch Cal
× MD785G	Basic Setting
⊡⊡ Conventional	Radio ID [Digital] 20
	Tx Preamble Duration [ms] 960
DMR Services	Group Call Hang Time [s] 6.0
Basic Encrypt	Private Call Hang Time [s]
Contact Contact Rx Group List	Sync Wakeup Time [ms] 360
Work Orders	Wakeup Retries 2
trine Scan	Wait Ack Delay [ms] 0
Emergency	Encode
ter	All Call Encode
	Private Call Encode 🔽
	Group Call Encode 🔽
	Decode
	Dadia Disable/Esoble Decode
	Remote Monitor Decode
	Emergency Remote Monitor Decode 🗸
	Alert Call Decode 🔽
	Radio Check Decode 🗸
	Over The Air Decode
	Authentication
	Over The Air Authentication
	Radio Disable/Enable Authentication
	Remote Monitor Authentication
	Air Interface Authentication Key
	Priority Interrupt
	Message Priority Interrupt 🗸
	Radio Disable Priority Interrupt
	All Call Priority Interrupt
	Display
	Display Caller ID And Alias 🗹
	Display Missed Call 🗹
	Miscellaneous
	Remote Monitor Duration [s] 10 v
	Data Bearer Service Hytera Defined Data v
	In Call GPS Revert
	All Call Talkback in Private Mode
	Encryption Board Presence Check Before Tx
	Only Rx Encrypted Voice/Data

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

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

2				Custor	ner Programming	g Software [C:\Users\PH0PPL\I
🔜 File Edit Program Option View Tools Wi	indow H	lelp				
Setting Accessories Buttons Telemetry One Touch	h Call Mei	nu UI Indicatio	on Network Analog 70cm P	1DGF WW S1T1 Alme	re 70cm Basic Encr	crypt
MD785G			Enc	crypt 🗌		
Conventional	[Encrypt Key Le	ngth Characters 🖌 32 Charac	ters 64 Chara	cters	
Zone						Encryption is Not Allowed in the second s
Channel DMR Services			10 10			- Amateur Service.
Basic		1 1	Rey Alias	10 Characters	Key Value	
Contact						
Rx Group List Quick Text						
Work Orders						
2-Tone Services						
⊕⊡ Personality ⊕⊡ Scan						
Roam						
Emergency Phone						
	_					Add
	_					Insert
						Delete



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.



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

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

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.



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

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



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

2		Custo	mer Programming S
🟭 File Edit Program Option View Tools	Windo	w Help	
🗅 🖆 🔚 🌧 🐏 🖨 💱 💈			
Setting Accessories Buttons Telemetry One To	uch Cal	Menu UI Indication Network Analog 70cm PI1DGF WW S1T1 A	Almere 70cm Basic Encr
X			
Radio Information	No	Quick Text	You may add any Text you wish here.
Common	1	CQ CQ	if can be up to 64 characters in length, these Quick Text Messages can be sent over
Conventional	2	Lam QRV	the air Via Repeater, or dierect. Simply goto
	2	Good Morning	your Radios Quick text menu and choose a
	3	Good Affernoon I	Msg to send, then choose a Contact to send i
	4	Have a good day!	to. press the P11, and your Msg will be sent.
Basic	5	Coodhuo I	
Contact	6	Good Nicht I	
	7	Good Night :	
Quick Text	8	Good Evening !	
Work Orders	9	IS QSL !	
	10	I am QRL !	
Personality	11	Roger	
i Scan	12	Wilco	
Herency	13	Everything OK?	
	14	Thanks 4 Info !	Add
	15	73 de PH0PPL - Peter	
			Insert
			Delete

Figure 34 Conventional – DMR Services – Quick Text

I challenge your fantasy ;-)



Figure 35 Conventional – DMR Services – Work Orders

2		Cu	stomer Prog	
🟭 File Edit Program Option View To	ols Window Help			
🗋 🖆 🔚 🤤 🐞 🐳	2			
Setting Accessories Buttons Telemetry 0	ne Touch Call Menu UI Indication Network	Analog 70cm PI1DGF WW S1T1	Almere 70cm	
×	Papia			
	Dasic			
	System Alias	System 1		et your ID here four numbers 0-9 can
Conventional	Primary ID	0001	b	e used.
General Setting				
trene 2018	Group ID	001		
DMR Services	PTT ID Type	Pre Only		The way in which the ID is sent can b
HDC1200 Services	PTT ID Decode		1	None can be chosen.
HDC1200 System				
Contact				
2-Tone Services	Advanced		-	
ersonality	Pretime [ms]	500 🗸		
terrency	Preamble Bit Sync	5 v]	
÷⊇ Phone	Limited Patience Timer [s]	Disable v]	
	Acknowledge Waiting Timer	1000 🗸]	
	Acknowledge Pretime [ms]	500 🗸]	
	DOS			
	DOS			
	DOS Post-Mute Duration [ms]	20 🗸		
	DOS Pre-Mute Duration [ms]	660 🗸		

Figure 36 Conventional – HDC1200 Services – System 1



Figure 37 Conventional – HDC1200 Services – Contact

	2			Customer Progra	amming Software [C	Λ
	🟭 File Edit Program Option View To	ools Window Help				
	🗅 🖆 🔛 🖨 🖏 🚑 🐺	2				
	Setting Accessories Buttons Telemetry (One Touch Call Menu UI Indication Network Analog 70cm	PI1DGF W	W S1T1 Almere 70cm B	asic Encrypt Contact R	x
	Setting Accessories Buttons Telemetry (Setting Accessories Buttons Telemetry (Dine Touch Call Menu UI Indication Network Analog 70cm Basic System Alias Pretime [s] 1st Tone Duration [s] 2nd Tone Duration [s] Long Tone Duration [s] Interval Time [s] Advanced Limited Patience Timer [s] A Tone [Hz] B Tone [Hz]	PIIDGF W 1750Hz 0.5 0.5 5.0 0.0 None 1750.0 1750.0	WV S1T1 Almere 70cm Bi	asic Encrypt Contact R	² tone services can be set here choose your appropriate tone and duration criteria.
		0.7	1750.0			
		C lone [Hz]	1750.0			
		D Tone [Hz]	1750.0	•		
		Clear to Transpond				
		Decode Fo	rmat	Call Type	Transpond	
		Decode 1 None	¥	None	×	
		Decode 2 None	¥	None	~	
		Decode 3 None	~	None	×	
		Decode 4 None	¥	None	× .	
8						

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

			Custome	r Programming Softv	var
🏭 File Edit Program Option View To	ools Window Help				
🗋 🖆 🖶 🎒 👹 🦛	2				
DF0MOT DF0MOT WW 1 1 FM 438.550 Con	ntact Worldwide Signaling Config	guration Sequences 1	5-Tone System 1 User Sys	tem 1	_
Radio Information					
🗄 🦲 Common	Tone Duration [ms]	1500 🗸		Standard	Same Instructions as Above.
🗄 📇 Conventional					
General Setting	Tone 0 Frequency[Hz]	1750	Tone 8 Frequency[Hz]	1531	
	Tone 1 Frequency(Hz)	1750	Tone 9 Frequency[Hz]	1657	
	Tone Thequency[12]	1750	Tone 3 Trequency[12]	1007	
OMR Services	Tone 2 Frequency[Hz]	954	Tone A Frequency[Hz]	1939	
5-Tone Services					
Signaling Configuration	Tone 3 Frequency[Hz]	1032	Tone B Frequency[Hz]	2270	
Encoder Definition	Tone 4 Frequency[Hz]	1117	Tone C Frequency[Hz]	2098	
Encoder Sequences					
Encoder Telegram	Tone 5 Frequency[Hz]	1209	Tone D Frequency[Hz]	2457	
A Mutical	Tana C Francisco (Na)	1209	Tees E Freewaaa (Na)	1702	
	Tone 6 Frequency[H2]	1300	Ione E Frequency[n2]	1132	
🚊 🗁 🛅 Decode Definition	Tone 7 Frequency[Hz]	1415	Tone F Frequency[Hz]	2750	
Decode Def 1					
in the Auto Acknowledge					
Auto Ack 1					
5-10ne Code System					
User Define Code System					
User System 1					
E-Contact List					
12345					
🖻 🚞 Status List					
Come here!					
🕀 💼 Roam					
Emergency					
teren en e					

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



Figure 40 Conventional – 2-Tone Services – Contact

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

2				Custo	omer Progra	ammin	ng S
🟭 File Edit Program Option View To	ols Window Help						
🗋 🖆 🖶 🌧 🤩 🐳	2						
Setting Accessories Buttons Telemetry C	ne Touch Call Menu UI Ind	lication Network	Analog 70cm	PI1DGF WW S1T1	Almere 70cm	Basic	Enc
MD785G	Encode Personality						
Common	Smart Call 1	None	*	2-Tone Call 1	~		
General Setting	Smart Call 2	None	~	2-Tone Call 1	~		
tane and the second s	Smart Call 3	None	~	2-Tone Call 1	\checkmark		
⊕ DMR Services ⊕ HDC1200 Services	Smart Call 4	None	~	2-Tone Call 1	\vee		
	Smart Call 5	None	~	2-Tone Call 1	\checkmark		
Personality 1							
Emergency							



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

🟭 Customer Pr	rogramming Software	[C:\Users\PH0PF	PL\Documer	nts\DMR_Hyte	era\Hytera PH0PPL
🔚 File Edit Program Option View To	ools Window Help				
🗋 🖆 🖶 😂 🖏 🤀	2				
Tone List 1 Accessories Rent Setting A	ccessories Buttons Telem	netry One Touch Call	Menu UI India	cation Network	Zone Nederland DF0N
→	PTT Personality				
Radio Information		PTT Key-up Mode	Disable		
Description Setting	РТ	T Key-up Encode Type	Telegram	•	
Microphone/VOX	PTT Ke	y-up Encode Telegram	Telegrams 1		
User Defined Tone	PTT De	e-key Encode Telegram	None	¥	
Accessories					
Conventional	Encode Personality				
		Sinaling Type		Call List	
Digital Channel	Smart Call 1 Type	Disable	~		~
Personality	Smart Call 2 Type	Disable	~		~
DMR Services	Smart Call 3 Type	^e Disable	~		~
Encrypt	Smart Call 4 Type	Disable	~		~
Contact	Smart Call 5 Type	Disable	~		~
Quick Text Work Orders S-Tone Services Encoder Definition C-Decode Definition Contact List Contact List Con	Decode Personality	Decoder Definition	1 2 3 4 9 10 11 12	5 6 7 4 2 13 14 15 1	6

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

Customer Progra	amming Software [C:\Users\PH0PPL\	Documents\D	MR_Hytera\H	Hytera PH0PPL C	Config 2013	09.12-afte	r fw update-2.rcd
File Edit Program Option View Tools	s Window Help						
🗋 🖆 🔚 😓 🖄 🏶 😽 🚺	2						
Accessories Rent Setting Accessories But	ttons Telemetry One Touch Call Menu UI Inc	dication Network	Zone Nederland	DF0MHR WW 1-T1	Basic Encr	ypt Contact	Nederland Quick Tex
×							
Radio Information	Available			Member	s		
E-Common							
🖉 Setting	Alias	<u>^</u>	No.	Alias		^	
Feature Control	m DB0AVR DL 1-T262		1	E Selected			
	IND DB0AVR DL 2-T262		2	Almere 70cm			
,🛱 UI Setting	I DB0AVR DOH 1-T20		3	PI1DGF NL 1-T9			
User Defined Tone	DB0AVR EU 1-T2		4	PD1DGF WW 2-	T1		
Tone List 1	DB0AVR Loc 1-T9	Add	>> 5	PD1DGF EU 2-T	2		
eff Doot	DB0AVR Loc 2-T9		6	IN PI1DGF NL 2-T8			
	DB0AVR Reg 2-T8	<< Rer	move 7	PI1DGF NL 2-T9			
General Setting	DB0AVR WW 1-T1		8	PI1DGF DOH 2-T	F20		
	DB0BS DL 1-T262		9	PIDGE NIT 2-T	21	_	
E Channel	DB0BS DL 2-T262		10	PIDGE NL 2-T2	04		
Personality	DB0BS DOH 1-T20		11	PIDGE B 2-T20	6		Up
DMR Services			12	PHDOF & 2 T23	- -	_	
5-Tone Services	DB0BS L oo 1 TP		12	PHDGE A2-123	2 60		Down
🚊 📇 Scan			13		02		
- 💇 Scan Nederland	M DB0BS L0C 2-19	- v	14	M PHUTRINE 1-19		~	
💇 Scan Duitsland	L						
Scan NL PI1UTR	Scan List Alias Scan Nederland		Print	ity Sween Time [s] 2	2.00	🗅 Choo	se the Scan li
				ing our cop raise [o]		- How	the radio is to
Roam NL Repeater	CTCSS/CDCSS Scan Mode Disabled		¥	Hang Time [s] ³	1.0	🗧 RX a	nd subsequen
••••• Phone	Scan Tx Mode Last Active Channe	ŧl	¥	Cha	nnel Marking]	
					Talkback 🗸]	
	Designed TX Channel M PHUTR NL 1-18)	~	Off Hoo	ok Suspends]	
	Priority Channel 1 🔁 Almere 70cm		¥				
	Priority Channel 2 🤤 None		¥				
	-		_				

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)

I File Edit Program Ontion View To	pols Window Help	Customer Programming Software [C:	\Users\PH0PPL\Document
	2		
Setting Accessories Buttons Telemetry C M0785G Gradio Information Granul Conventional General Setting General Setting General Setting General Setting HDC1200 Services General Setvices General Setvices	Available Available Alias Men PHDGF EU SIT2 PHDGF NL SIT204 PHDGF NL SIT204 PHDGF NL SIT9 PHDGF NL SIT9 PHDGF NU SIT9 PHDGF NW SIT1	Add >>	Choose your Required Channels to Add to The Roam list. Name the List however you wish.
G-G Scan G-G Roam List 1 G-G Roam List 1 G-G Phone	Im PHUTR EU SZT1 Im PHUTR WW S1T1 Im PHUTR NL S1T204 Im PHUTR NL S2T204 Im PHUTR NL SZT9	Remove	Up Down
	Roam List Alias Roam List 1 RSSI Threshold 108	Active Site Roam Return To Selected CH Follow All Master Site Config	

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

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



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.



Figure 47 Conventional – Emergency – Lone Worker

<u>.</u>		Customer Progra				
🚬 File Edit Program Option View Tools Window Help						
Setting Accessories Buttons Telemetry	One Touch Call Menu UI Indication Network Ar	nalog 70cm PI1DGF WW S1T1 Almere 70cm				
×						
Radio Information	Emergency System Alias	DigitalSys 1				
⊡ — Conventional 	Emergency Type	Disable V				
Enertime Zone	Emergency Mode	Call Only V				
DMR Services	Revert Channel	Selected V				
	Impolite Retries	15				
terring Scan terring Roam	Polite Retries	5				
Emergency	Alarm w/Call To Follow					
Digital Emergency	Voice Cycles	1				
Analog Emergency	Hot Mic Duration [s]	10				
	Tx Interval Duration [s]	10				
	Emergency Priority Interrupt					

Figure 48 Conventional – Emergency – Digital Emergency



Figure 49 Conventional – Emergency – Analog Emergency

2	Custor	mer Prog
🔜 File Edit Program Option View To	ools Window Help	
🗋 🖆 🔚 😂 😂 🖨 😽		
Setting Accessories Buttons Telemetry 0	One Touch Call Menu UI Indication Network Analog 70cm PI1DGF WW S1T1	Almere 70
×		
Radio Information	Phone System	
⊡ Common	System Alias Phone System 1	
ian General Setting		
Environ Zone	Digit Duration[ms]	-
DMR Services	Digit Interval Duration[ms] 60	-
HDC1200 Services	Pause Digit Duration[ms] 60	-
Personality		•
t ⊡ Scan ⊕⊡ Roam	Pretime [ms] 500	÷
Emergency	Hold Time[ms] 2000	▲ ▼
Phone System	Live Dial Min Digit Duration[ms] 50	▲ ▼
Phone List	Live Dial Max Digit Duration[ms] 750	•
	Live Dial Digit Interval Duration[ms] 50	•
	Analog DTMF Deviation(25KHz)[Hz] 3000	▲ ▼
	Analog DTMF Deviation(20KHz)[Hz] 2400	▲ ▼
	Analog DTMF Deviation (12.5KHz) [Hz] 1500	▲ ▼
	Digital DTMF Tx Gain [dB] 0	▲ ▼
	Override TX Admit	
	Access Code	
	Button None 🗸	
	Number 1234567890*#P123	
	De-Access Code	
	Button None 🗸	
	Number 1234567890*#P123	

Figure 50 Conventional – Phone – Phone System 1

HIE Edit Program Option View Too	ols Window Help			
Setting Accessories Buttons Telemetry On	e Touch Call Menu UI Indication	Network Analog 70cm PI1DGF WW S1T1	Almere 70cm Basic Encrypt Contact Rx	
MD785G General Setting General Setting General Setting General Setting General Setting General Setvices DMR Services General Setvices	No. Call Alias 1 Disconect 2 OE1 438 950 3 OE2 439 200 4 OE3 439.000 5 OE3 439.025	Phone Number # 6406 155168 553335 193828	These are Essentially Autodiale set these to the parameters you Press of the PTT when one is ch the Data over the Air.	r Entries. J wish, and a osen will send
2-Tone Services Personality Scan Roam Emergency Phone	6 OE3 439.075 7 OE3 438.850 8 OE3 438.900 9 OE4 438.850 10 OE5 438.575	383881 344042 589653 156782 351807		
Phone System 	11 OE5 438.950 12 OE6 438.775 13 OE6 438.925 14 OE6 439.100 15 OE6 438.975 16 OE7 438.875 17 OE5 430.202	389978 521344 245491 383901 62308 96498 96498	Add Insert Delete	

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.				