TDFM-6000/7000
FACTORY DEFAULT
CODEPLUG TEMPLATES

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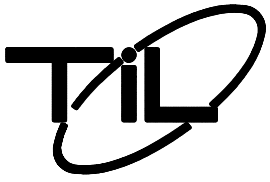

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1.0 Introduction

The purpose of this document is to outline what factory default parameters and frequencies are programmed in the various RF modules that are used in the TDFM 600/6000/7000 series multiband radios.

The TDFM 600/6000/7000 series radios have multiband capability and may contain 2 bands in the 600, up to 3 separate bands in the 6000 and up to 4 in the 7000.
A standard set of frequencies is pre programmed into each RF module at the factory for the purpose of alignment and testing.

There are 4 different bands used in the TDFM series radios:

VHF	136-178 Mhz (TYPE I)	136-174 Mhz (TYPE II)
UHF-LO	403-470 Mhz (TYPE1)	380-470 Mhz (TYPE II)
UHF-hi	450-512 Mhz (TYPE I)	450-520 Mhz (TYPE II)
800	806-870 Mhz (TYPE I)	764-796,806-870 Mhz (TYPE II)

The RF portion of the 600/6000/7000 radios use a modular RF transceiver or “BAND Module”. These “Modules” are manufactured by a third party and are provided in two different types based on hardware and software.

Older TDFM-600/6000 radios are equipped with “Type I” modules. The “Type I” modules have since become obsolete and are now superseded by the TYPE II modules. All new TDFM-600/6000 and TDFM 7000 radios are based on “TYPE II” modules.

These “modules are supported by a computer program made by Motorola called CPS or “Customer Programming Software”
Motorola INC. supplies the CPS software exclusively to the end user.
Technisonic is not licensed to distribute the CPS software for the TDFM 600/6000/7000 radios.
There are two different versions of the CPS software required for the TDFM-600/6000/7000 radios.
“XTS 3000 CPS” is used to support type I modules. “ASTRO PORTABLE CPS” is used to support TYPE II modules.

2.0 Code Plug Tables 1to 8

The following tables outline all the global default settings in all the band frequency files or “codeplugs”.

NOTE: Some codeplugs are for modules that have trunking as well as conventional channels.

Technisonic does not program any trunking information in the default codeplugs due to the fact that each trunking system is different and requires a special “trunking system key” to access this part of the codeplug. Trunking system keys are the property of the trunking system administrators and are not widely distributed to end-users of those trunking systems or Technisonic Industries Ltd..
For help in this area, Technisonic recommends that the end user of the TDFM-600/6000/7000 radios contact the trunking system administrators for access to programming for those systems.

Tables 1-8 show global parameters that are common to all codeplugs. Tables 9-16 show the specific personality settings for each band and type of module.
Tables 17-20 show band specific frequency information for the four bands in TYPE I modules.
Tables 21-24 show band specific frequency information for the four bands in TYPE II modules.

RADIO WIDE		
GENERAL		
MAX CHAN	255	(FIXED)
ALERT TONES		
ENABLED	YES	
MIN VOL	0	
TONE OFFSET	-10	(db)
MUTE	KEY TONES	
TIME OUT TIMERS		
1	INFINITE	(SEC)
2	30	(SEC)
3	60	(SEC)
4	120	(SEC)
HOME ZONE		
ENABLED		
ZONE	1	
CHANNEL	1	
AUDIO GAIN		
ALL DISABLED		
DIG AUDIO OPTIONS		
ALL DISABLED		
ADVANCED		
ULTRA NAR. FLTER	7.8	Khz
ROT. SWITCH	CHANNEL	
ADVANCED II		
SHORT KEY	50	(ms)
LONG KEY	1000	(ms)
SOFT OFF	DISABLED	
SURVAILANCE MODE		
ALL DISABLED		

TABEL1: RADIO WIDE SETTINGS

CONTROLS		
BUTTONS	CONVENTIONAL	TRUNKING
F4 (TOP)	VOLUME SET TONE	VOLUME SET TONE
F1 (SIDE 1)	MONITOR (SQL)	PRIVATE CALL
F2 (SIDE 2)	NUISANCE DELETE	NUISANCE DELETE
F3 (SIDE 3)	TALKAROUND/DIRECT	SITE DISPL/SRCH

TABLE 2: BUTTON SETTINGS

HAND HELD CONTROL HEAD (HHCH)		
TOP BUTTONS	CONVENTIONAL	TRUNKING
LEFT	UNPROGRAMMED	UNPROGRAMMED
MIDDLE	UNPROGRAMMED	UNPROGRAMMED
RIGHT	UNPROGRAMMED	UNPROGRAMMED
SIDE BUTTONS	CONVENTIONAL	TRUNKING
LEFT	UNPROGRAMMED	UNPROGRAMMED
MIDDLE	UNPROGRAMMED	UNPROGRAMMED
RIGHT	UNPROGRAMMED	UNPROGRAMMED

TABLE 3: HHCH SETTINGS (NOT USED IN TDFM-600/6000/7000 RADIOS)

SWITCHES:		
ROTARY CONTROL	CHANNEL SELECT	
ESW (2 POS. CONCENTRIC)	CONVENTIONAL	TRUNKING
A	UNPROGRAMMED	BLANK
B	UNPROGRAMMED	BLANK
TSW (3 POS TOGGLE)	CONVENTIONAL	TRUNKING
A	BLANK	BLANK
B	PL DISABLE	BLANK
C	SCAN	BLANK

TABLE 4: SWITCH SETTINGS

DISPLAY & MENU	
GENERAL	
TEXT JUSTIFICATION	LEFT
CHANNEL TEST SIZE	9
ZONE TEXT SIZE	3
SLOW SCROLL	1000
FAST SCROLL	250
SLOW SCROLL COUNT	3
MENU ITEMS	
CONVENTIONAL	TRUNKED
ZONE	ZONE
MUTE	MUTE
PWR	PWR
PROG	PROG
VIEW	CALL
	PAGE

TABLE 5: DISPLAY & MENU SETTINGS

CONVENTIONAL	
GENERAL	
MONITOR TYPE	OPEN SQUELCH
DIRECT FREQUENCY	DISABLED
HUB DEFEATS PL	DISABLED
LATCH ENABLE TONE	ENABLED
LATCH EN. TIME (SEC)	2

TABLE 6: CONVENTIONAL GLOBAL SETTINGS

SCAN CONFIGURATION	
RADIO WIDE	
NUISANCE MODE DELETE	YES
PRIORITY SCAN ALERT	NO
HUB SUSPENDS SCAN	NO
VOICE RX HOLD TIME (SEC)	3
DATA RX HOLD TIME (SEC)	3
CONVENTIONAL	
CARRIER DETECT REQUIRED	NO
PRIORITY CHANNEL MARKING	NO
MONITOR HOLD TIME (SEC)	6
TIME BETWEEN PRIORITY SMAPLES (ms)	750

TABLE 7: GLOBAL SCAN SETTINGS

SCAN LIST-1		
SCAN LIST TYPE	CONVENTIONAL	
PIRORITY ASSIGNMENT		
DYNAMIC PRIORITY	NO	
PRIORITY 1	1	
PRIORITY 2	2	
NON PRIORITY MEMBERS		FIXED
DESIGNATED VOICE TX MEMBER		TALK BACK
DESIGNATED DATA MEMBER		NONE
SCAN LIST 1		
LIST MEMBER	ZONE	CHANNEL
1	1	1
2	1	2
3	1	3
4-15	UNASSIGNED	UNASSIGNED

TABLE 8: PRIORITY SCAN SETTINGS & SELECTED CHANNELS FOR SCAN LIST-1

VHF TYPE I MODULE	
TOTAL 50	
PERSONALITY ATTIBUTES	PERS.#(S)
ANALOG (NON-ASTRO)	1-5,9-50
DIGITAL (ASTRO)	6-8
WIDE BAND (25kHz)	1-5,14-50
NARROW (12.5 kHz)	6-13
CAR. SQUELCH (CSQ)	1-3,9-11,15-50
CTCSS (PL) 103.5 Hz	4,12,14
DCS (DPL) 152	5,13
DIGITAL NAC 293	6-8
UNMUTE, OR MUTE SQ.	1-50
TX POWER HIGH	1-50
SCAN LIST 1	1-14
T.O.T. 60 (SEC)	1-46
TALK AROUND ENAB.	14
RX ONLY	47-50
SQUELCH SET 6	1-50
RX EMPHASIS	1-50
BUSY LED ON	1-50
TX EMPHASIS ON	1-46
REVERSE BURST ON	1-46
HOT KEYPAD ENABLED	1-5,9-14

UHF LO TYPE I MODULE	
TOTAL 35	
PERSONALITY ATTIBUTES	PERS.#(S)
ANALOG (NON-ASTRO)	1-5,9-35
DIGITAL (ASTRO)	6-8
WIDE BAND (25kHz)	1-5,14-35
NARROW (12.5 kHz)	6-13
CAR. SQUELCH (CSQ)	1-3,9-11,15-35
CTCSS (PL) 103.5 Hz	4,12,14
DCS (DPL) 152	5,13
DIGITAL NAC 293	6-8
UNMUTE, OR MUTE SQ.	1-35
TX POWER HIGH	1-35
SCAN LIST 1	1-14
T.O.T. 60 (SEC)	1-35
TALK AROUND ENAB.	14
RX ONLY	NONE
SQUELCH SET 6	1-35
RX EMPHASIS	1-35
BUSY LED ON	1-35
TX EMPHASIS ON	1-35
REVERSE BURST ON	1-35
HOT KEYPAD ENABLED	1-5,9-35

UHF HI TYPE I MODULE	
TOTAL 30	
PERSONALITY ATTIBUTES	PERS.#(S)
ANALOG (NON-ASTRO)	1-5,9-30
DIGITAL (ASTRO)	6-8
WIDE BAND (25kHz)	1-5,14-30
NARROW (12.5 kHz)	6-13
CAR. SQUELCH (CSQ)	1-3,9-11,15-30
CTCSS (PL) 103.5 Hz	4,12,14
DCS (DPL) 152	5,13
DIGITAL NAC 293	6,7,8
UNMUTE, OR MUTE SQ.	1-30
TX POWER HIGH	1-30
SCAN LIST 1	1-14
T.O.T. 60 (SEC)	1-30
TALK AROUND ENAB.	14
RX ONLY	NONE
SQUELCH SET 6	1-30
RX EMPHASIS	1-30
BUSY LED ON	1-30
TX EMPHASIS ON	1-30
REVERSE BURST ON	1-30
HOT KEYPAD ENABLED	1-5,9-30

800 TYPE I MODULE	
TOTAL 24	
PERSONALITY ATTIBUTES	PERS.#(S)
ANALOG (NON-ASTRO)	1-5,9-24
DIGITAL (ASTRO)	6-8
WIDE BAND (25kHz)	1-5,14-24
NARROW (12.5 kHz)	6-13
CAR. SQUELCH (CSQ)	1-3,9-11,15-24
CTCSS (PL) 103.5 Hz	4,12,14
DCS (DPL) 152	5,13
DIGITAL NAC 293	6,7,8
UNMUTE, OR MUTE SQ.	1-24
TX POWER HIGH	1-24
SCAN LIST 1	1-14
T.O.T. 60 (SEC)	1-24
TALK AROUND ENAB.	14
RX ONLY	NONE
SQUELCH SET 6	1-24
RX EMPHASIS	1-24
BUSY LED ON	1-24
TX EMPHASIS ON	1-24
REVERSE BURST ON	1-24
HOT KEYPAD ENABLED	1-5,9-24

TABLES 9,10,11&12: PERSONALITY ATTRIBUTES FOR ALL 4 BANDS WITH TYPE I MODULES

VHF TYPE II MODULE	
TOTAL 50	
PERSONALITY ATTIBUTES	PERS.#(S)
ANALOG (NON-ASTRO)	1-5,9-50
DIGITAL (ASTRO)	6-8
WIDE BAND (25kHz)	1-5,14-50
NARROW (12.5 kHz)	6-13
CAR. SQUELCH (CSQ)	1-3,9-11,15-50
CTCSS (PL) 103.5 Hz	4,12,14
DCS (DPL) 152	5,13
DIGITAL NAC 293	6-8
UNMUTE, OR MUTE SQ.	1-50
TX POWER HIGH	1-50
SCAN LIST 1	1-14
T.O.T. 60 (SEC)	1-46
TALK AROUND ENAB.	14
RX ONLY	47-50
SQUELCH SET 6	1-50
RX EMPHASIS	1-50
BUSY LED ON	1-50
TX EMPHASIS ON	1-46
REVERSE BURST ON	1-46
HOT KEYPAD ENABLED	1-5,9-14

UHF LO TYPE II MODULE	
TOTAL 39	
PERSONALITY ATTIBUTES	PERS.#(S)
ANALOG (NON-ASTRO)	1-5,9-39
DIGITAL (ASTRO)	6-8
WIDE BAND (25kHz)	1-5,14-39
NARROW (12.5 kHz)	6-13
CAR. SQUELCH (CSQ)	1-3,9-11,15-39
CTCSS (PL) 103.5 Hz	4,12,14
DCS (DPL) 152	5,13
DIGITAL NAC 293	6-8
UNMUTE, OR MUTE SQ.	1-39
TX POWER HIGH	1-39
SCAN LIST 1	1-14
T.O.T. 60 (SEC)	1-39
TALK AROUND ENAB.	14
RX ONLY	NONE
SQUELCH SET 6	1-39
RX EMPHASIS	1-39
BUSY LED ON	1-39
TX EMPHASIS ON	1-39
REVERSE BURST ON	1-39
HOT KEYPAD ENABLED	1-5,9-39

UHF HI TYPE II MODULE	
TOTAL 32	
PERSONALITY ATTIBUTES	PERS.#(S)
ANALOG (NON-ASTRO)	1-5,9-32
DIGITAL (ASTRO)	6-8
WIDE BAND (25kHz)	1-5,14-32
NARROW (12.5 kHz)	6-13
CAR. SQUELCH (CSQ)	1-3,9-11,15-32
CTCSS (PL) 103.5 Hz	4,12,14
DCS (DPL) 152	5,13
DIGITAL NAC 293	6-8
UNMUTE, OR MUTE SQ.	1-32
TX POWER HIGH	1-32
SCAN LIST 1	1-14
T.O.T. 60 (SEC)	1-32
TALK AROUND ENAB.	14
RX ONLY	NONE
SQUELCH SET 6	1-32
RX EMPHASIS	1-32
BUSY LED ON	1-32
TX EMPHASIS ON	1-32
REVERSE BURST ON	1-32
HOT KEYPAD ENABLED	1-5,9-32

800 TYPE II MODULE	
TOTAL 27	
PERSONALITY ATTIBUTES	PERS.#(S)
ANALOG (NON-ASTRO)	1-5,9-27
DIGITAL (ASTRO)	6-8
WIDE BAND (25kHz)	1-5,14-27
NARROW (12.5 kHz)	6-13
CAR. SQUELCH (CSQ)	1-3,9-11,15-27
CTCSS (PL) 103.5 Hz	4,12,14
DCS (DPL) 152	5,13
DIGITAL NAC 293	6-8
UNMUTE, OR MUTE SQ.	1-27
TX POWER HIGH	1-27
SCAN LIST 1	1-14
T.O.T. 60 (SEC)	1-27
TALK AROUND ENAB.	14
RX ONLY	NONE
SQUELCH SET 6	1-27
RX EMPHASIS	1-27
BUSY LED ON	1-27
TX EMPHASIS ON	1-27
REVERSE BURST ON	1-27
HOT KEYPAD ENABLED	1-5,9-27

TABLES 13,14,15&16: PERSONALITY ATTRIBUTES FOR ALL 4 BANDS WITH TYPE II MODULES

The following tables show the frequencies and tones programmed in the “Zone Channel Assignment” section in each band of module.
Each module is programmed with 2 groups or “Zones” of frequencies. The first Zone (Z1) has 14-factory test Frequencies. These frequency sets include frequencies at the bottom, middle and top of each band respectively.
Some of the channels are programmed with carrier squelch (CSQ), CTCSS (PL) & DCS (DPL) tone/codes.
Channels 6-8 are P25 digital conventional channels with a Network Access Code (NAC) of 293.

The second Zone of channels (Z2) varies from band to band. It contains a number of test frequencies that are all FM wide (25KHz), with no tone/code signalling (CSQ).

These frequencies are provided for post installation EMI and functional testing.

The first four tables 17-20 are for VHF, UHF-LO, UHF-HI and 800 Mhz series I modules. The second set of tables 21-24 are for series II.

VHF TYPE I MODULE							
ZONE"Z1"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL/NAC	NOTES
1	1	136.00CSW	136.0000	136.0000	FM-25KHz	CSQ	SCAN-1
2	2	157.00CSW	157.0000	157.0000	FM-25KHz	CSQ	SCAN-1
3	3	178.00CSW	178.0000	178.0000	FM-25KHz	CSQ	SCAN-1
4	4	157.00PLW	157.0000	157.0000	FM-25KHz	PL 103.5	
5	5	157.0DPLW	157.0000	157.0000	FM-25KHz	DPL 152	
6	6	136.00DIG	136.0000	136.0000	DIG 12.5KHz	NAC 293	
7	7	157.00DIG	157.0000	157.0000	DIG 12.5KHz	NAC 293	
8	8	178.00DIG	178.0000	178.0000	DIG 12.5KHz	NAC 293	
9	9	136.00CSN	136.0000	136.0000	FM-12.5KHz	CSQ	
10	10	157.00CSN	157.0000	157.0000	FM-12.5KHz	CSQ	
11	11	178.00CSN	178.0000	178.0000	FM-12.5KHz	CSQ	
12	12	157.00PLN	157.0000	157.0000	FM-12.5KHz	PL 103.5	
13	13	157.0DPLN	157.0000	157.0000	FM-12.5KHz	DPL 152	
14	14	154.00T/A	154.0000	144.0000	FM-25KHz	PL 107.2	

TABLE 17: ZONE CHANNEL ASSIGNMENT FOR VHF SERIES I MODULES

ZONE"Z2"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	15	136.0000	136.0000	136.0000	FM-25KHz	CSQ	
2	16	136.0125	136.0125	136.0125	FM-25KHz	CSQ	
3	17	138.0000	138.0000	138.0000	FM-25KHz	CSQ	
4	18	140.0000	140.0000	140.0000	FM-25KHz	CSQ	
5	19	142.8000	142.8000	142.8000	FM-25KHz	CSQ	
6	20	143.1800	143.1800	143.1800	FM-25KHz	CSQ	
7	21	143.1825	143.1825	143.1825	FM-25KHz	CSQ	
8	22	143.2125	143.2125	143.2125	FM-25KHz	CSQ	
9	23	143.2250	143.2250	143.2250	FM-25KHz	CSQ	
10	24	146.5350	146.5350	146.5350	FM-25KHz	CSQ	
11	25	147.0000	147.0000	147.0000	FM-25KHz	CSQ	
12	26	152.5000	152.5000	152.5000	FM-25KHz	CSQ	
13	27	156.0000	156.0000	156.0000	FM-25KHz	CSQ	
14	28	157.0000	157.0000	157.0000	FM-25KHz	CSQ	
15	29	157.5375	157.5375	157.5375	FM-25KHz	CSQ	
16	30	157.5425	157.5425	157.5425	FM-25KHz	CSQ	
17	31	157.5000	157.5000	157.5000	FM-25KHz	CSQ	
18	32	157.5500	157.5500	157.5500	FM-25KHz	CSQ	
19	33	160.0000	160.0000	160.0000	FM-25KHz	CSQ	
20	34	162.0000	162.0000	162.0000	FM-25KHz	CSQ	
21	35	162.1500	162.1500	162.1500	FM-25KHz	CSQ	
22	36	166.6750	166.6750	166.6750	FM-25KHz	CSQ	
23	37	167.3500	167.3500	167.3500	FM-25KHz	CSQ	
24	38	168.5000	168.5000	168.5000	FM-25KHz	CSQ	
25	39	168.6250	168.6250	168.6250	FM-25KHz	CSQ	
26	40	168.6500	168.6500	168.6500	FM-25KHz	CSQ	
27	41	171.9000	171.9000	171.9000	FM-25KHz	CSQ	
28	42	172.0000	172.0000	172.0000	FM-25KHz	CSQ	
29	43	173.9875	173.9875	173.9875	FM-25KHz	CSQ	
30	44	174.0000	174.0000	174.0000	FM-25KHz	CSQ	
31	45	176.0000	176.0000	176.0000	FM-25KHz	CSQ	
32	46	178.0000	178.0000	178.0000	FM-25KHz	CSQ	
33	47	162.4750	162.4750	N/A	FM-25KHz	CSQ	RX ONLY
34	48	162.4000	162.4000	N/A	FM-25KHz	CSQ	RX ONLY
35	49	162.5500	162.5500	N/A	FM-25KHz	CSQ	RX ONLY
36	50	161.7750	161.7750	N/A	FM-25KHz	CSQ	RX ONLY

TABLE 17 CONTINUED

UHF LO TYPE I MODULE							
ZONE"Z1"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	1	403.00CSW	403.0000	403.0000	FM-25KHz	CSQ	SCAN-1
2	2	454.00CSW	454.0000	454.0000	FM-25KHz	CSQ	SCAN-1
3	3	470.00CSW	470.0000	470.0000	FM-25KHz	CSQ	SCAN-1
4	4	454.00PLW	454.0000	454.0000	FM-25KHz	PL 103.5	
5	5	454.0DPLW	454.0000	454.0000	FM-25KHz	DPL 152	
6	6	403.00DIG	403.0000	403.0000	DIG 12.5KHz	NAC 293	
7	7	454.00DIG	454.0000	454.0000	DIG 12.5KHz	NAC 293	
8	8	470.00DIG	470.0000	470.0000	DIG 12.5KHz	NAC 293	
9	9	403.00CSN	403.0000	403.0000	FM-12.5KHz	CSQ	
10	10	454.00CSN	454.0000	454.0000	FM-12.5KHz	CSQ	
11	11	470.00CSN	470.0000	470.0000	FM-12.5KHz	CSQ	
12	12	454.00PLN	454.0000	454.0000	FM-12.5KHz	PL 103.5	
13	13	454.0DPLN	454.0000	454.0000	FM-12.5KHz	DPL 152	
14	14	452.00T/A	452.0000	457.0000	FM-25KHz	PL 107.2	
ZONE"Z2"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	15	403.0000	403.0000	403.0000	FM-25KHz	CSQ	
2	16	403.1125	403.1125	403.1125	FM-25KHz	CSQ	
3	17	406.1000	406.1000	406.1000	FM-25KHz	CSQ	
4	18	414.6500	414.6500	414.6500	FM-25KHz	CSQ	
5	19	418.1000	418.1000	418.1000	FM-25KHz	CSQ	
6	20	422.7375	422.7375	422.7375	FM-25KHz	CSQ	
7	21	430.0000	430.0000	430.0000	FM-25KHz	CSQ	
8	22	440.0250	440.0250	440.0250	FM-25KHz	CSQ	
9	23	441.5000	441.5000	441.5000	FM-25KHz	CSQ	
10	24	445.5000	445.5000	445.5000	FM-25KHz	CSQ	
11	25	446.4000	446.4000	446.4000	FM-25KHz	CSQ	
12	26	450.0000	450.0000	450.0000	FM-25KHz	CSQ	
13	27	454.0000	454.0000	454.0000	FM-25KHz	CSQ	
14	28	457.0000	457.0000	457.0000	FM-25KHz	CSQ	
15	29	458.5000	458.5000	458.5000	FM-25KHz	CSQ	
16	30	460.0000	460.0000	460.0000	FM-25KHz	CSQ	
17	31	461.5000	461.5000	461.5000	FM-25KHz	CSQ	
18	32	466.0000	466.0000	466.0000	FM-25KHz	CSQ	
19	33	469.5000	469.5000	469.5000	FM-25KHz	CSQ	
20	34	469.9875	469.9875	469.9875	FM-25KHz	CSQ	
21	35	470.0000	470.0000	470.0000	FM-25KHz	CSQ	

TABLE 18: ZONE CHANNEL ASSIGNMENT FOR UHF-LO SERIES I MODULES

UHF HI TYPE I MODULE							
ZONE"Z1"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	1	450.00CSW	450.0000	450.0000	FM-25KHz	CSQ	SCAN-1
2	2	481.00CSW	481.0000	481.0000	FM-25KHz	CSQ	SCAN-1
3	3	512.00CSW	512.0000	512.0000	FM-25KHz	CSQ	SCAN-1
4	4	481.00PLW	481.0000	481.0000	FM-25KHz	PL 103.5	
5	5	481.0DPLW	481.0000	481.0000	FM-25KHz	DPL 152	
6	6	450.00DIG	450.0000	450.0000	DIG 12.5KHz	NAC 293	
7	7	481.00DIG	481.0000	481.0000	DIG 12.5KHz	NAC 293	
8	8	512.00DIG	512.0000	512.0000	DIG 12.5KHz	NAC 293	
9	9	450.00CSN	450.0000	450.0000	FM-12.5KHz	CSQ	
10	10	481.00CSN	481.0000	481.0000	FM-12.5KHz	CSQ	
11	11	512.00CSN	512.0000	512.0000	FM-12.5KHz	CSQ	
12	12	481.00PLN	481.0000	481.0000	FM-12.5KHz	PL 103.5	
13	13	481.0DPLN	481.0000	481.0000	FM-12.5KHz	DPL 152	
14	14	462.00T/A	462.0000	467.0000	FM-25KHz	PL 107.2	
ZONE"Z2"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	15	450.0000	450.0000	450.0000	FM-25KHz	CSQ	
2	16	454.0000	454.0000	454.0000	FM-25KHz	CSQ	
3	17	457.0000	457.0000	457.0000	FM-25KHz	CSQ	
4	18	458.5000	458.5000	458.5000	FM-25KHz	CSQ	
5	19	460.0000	460.0000	460.0000	FM-25KHz	CSQ	
6	20	461.5000	461.5000	461.5000	FM-25KHz	CSQ	
7	21	466.0000	466.0000	466.0000	FM-25KHz	CSQ	
8	22	469.5000	469.5000	469.5000	FM-25KHz	CSQ	
9	23	469.9875	469.9875	469.9875	FM-25KHz	CSQ	
10	24	470.0000	470.0000	470.0000	FM-25KHz	CSQ	
11	25	481.0000	481.0000	481.0000	FM-25KHz	CSQ	
12	26	488.0000	488.0000	488.0000	FM-25KHz	CSQ	
13	27	489.0000	489.0000	489.0000	FM-25KHz	CSQ	
14	28	510.0000	510.0000	510.0000	FM-25KHz	CSQ	
15	29	511.5000	511.5000	511.5000	FM-25KHz	CSQ	
16	30	512.0000	512.0000	512.0000	FM-25KHz	CSQ	

Table 19 ZONE CHANNEL ASSIGNMENT FOR UHF-HI SERIES I MODULES

800 TYPE I MODULE							
ZONE"Z1"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	1	8510125CW	851.0125	851.0125	FM-25KHz	CSQ	SCAN-1
2	2	8660000CW	866.0000	866.0000	FM-25KHz	CSQ	SCAN-1
3	3	8689875CW	868.9875	868.9875	FM-25KHz	CSQ	SCAN-1
4	4	866000PLW	866.0000	866.0000	FM-25KHz	PL 103.5	
5	5	86600DPLW	866.0000	866.0000	FM-25KHz	DPL 152	
6	6	8510125DG	851.0125	851.0125	DIG 12.5KHz	NAC 293	
7	7	8660000DG	866.0000	866.0000	DIG 12.5KHz	NAC 293	
8	8	8689875DG	868.9875	868.9875	DIG 12.5KHz	NAC 293	
9	9	8510125CN	851.0125	851.0125	FM-12.5KHz	CSQ	
10	10	8660000CN	866.0000	866.0000	FM-12.5KHz	CSQ	
11	11	8689875CN	868.9875	868.9875	FM-12.5KHz	CSQ	
12	12	866000PLN	866.0000	866.0000	FM-12.5KHz	PL 103.5	
13	13	86600DPLN	866.0000	866.0000	FM-12.5KHz	DPL 152	
14	14	860.00T/A	860.0000	815.0000	FM-25KHz	PL 107.2	
ZONE"Z2"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	15	815.50TX	860.5000	815.5000	FM-25KHz	CSQ	TX ONLY
2	16	851.0125	851.0125	851.0125	FM-25KHz	CSQ	
3	17	851.0250	851.0250	851.0250	FM-25KHz	CSQ	
4	18	851.0375	851.0375	851.0375	FM-25KHz	CSQ	
5	19	862.5375	862.5375	862.5375	FM-25KHz	CSQ	
6	20	856.3375	856.3375	856.3375	FM-25KHz	CSQ	
7	21	860.0000	860.0000	860.0000	FM-25KHz	CSQ	
8	22	866.0000	866.0000	866.0000	FM-25KHz	CSQ	
9	23	868.0125	868.0125	868.0125	FM-25KHz	CSQ	
10	24	868.9875	868.9875	868.9875	FM-25KHz	CSQ	

TABLE 20 ZONE CHANNEL ASSIGNMENT FOR 800 Mhz SERIES I MODULES

Most of the frequencies programmed in the “TYPE II” modules are very similar to those in the “TYPE I“ modules.
There are some slight differences.
The TYPE II modules have wider frequency ranges that that of the TYPE I. With one exception; the VHF TYPE II has slightly less than that of the TYPE I VHF.

TYPE I units have a maximum of 255 channels or talkgroups per band. TYPE II modules can have up to 510 Channels or talkgroups, but only a maximum of 255 channels can be programmed to any ZONE in a TYPE II module.

The 800 Mhz TYPE II can operate in the 764-796 MHz in sub bands as well as the 806-870. The TYPE I units can only operate in the 806–870 MHz band.

NOTE: Channels marked “TX ONLY” are transmit only channels. The module is not capable of receiving at the frequency programmed for transmit on that channel.

Channels marked as “SCAN-1” are members of scan list 1. This is also shown in TABLE 8.
These are the channels being scanned If the radio on this band is put into SCAN mode.

Each module has its own scan list. Channels from other bands cannot be put into the same list.

VHF TYPE II MODULE							
ZONE"Z1"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL/NAC	NOTES
1	1	136.00CSW	136.0000	136.0000	FM-25KHz	CSQ	SCAN-1
2	2	157.00CSW	157.0000	157.0000	FM-25KHz	CSQ	SCAN-1
3	3	174.00CSW	174.0000	174.0000	FM-25KHz	CSQ	SCAN-1
4	4	157.00PLW	157.0000	157.0000	FM-25KHz	PL 103.5	
5	5	157.0DPLW	157.0000	157.0000	FM-25KHz	DPL 152	
6	6	136.00DIG	136.0000	136.0000	DIG 12.5KHz	NAC 293	
7	7	157.00DIG	157.0000	157.0000	DIG 12.5KHz	NAC 293	
8	8	174.00DIG	174.0000	174.0000	DIG 12.5KHz	NAC 293	
9	9	136.00CSN	136.0000	136.0000	FM-12.5KHz	CSQ	
10	10	157.00CSN	157.0000	157.0000	FM-12.5KHz	CSQ	
11	11	174.00CSN	174.0000	174.0000	FM-12.5KHz	CSQ	
12	12	157.00PLN	157.0000	157.0000	FM-12.5KHz	PL 103.5	
13	13	157.0DPLN	157.0000	157.0000	FM-12.5KHz	DPL 152	
14	14	154.00T/A	154.0000	144.0000	FM-25KHz	PL 107.2	

TABLE 21: ZONE CHANNEL ASSIGNMENT FOR VHF SERIES II MODULES

ZONE"Z2"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	15	136.0000	136.0000	136.0000	FM-25KHz	CSQ	
2	16	136.0125	136.0125	136.0125	FM-25KHz	CSQ	
3	17	138.0000	138.0000	138.0000	FM-25KHz	CSQ	
4	18	140.0000	140.0000	140.0000	FM-25KHz	CSQ	
5	19	142.8000	142.8000	142.8000	FM-25KHz	CSQ	
6	20	143.1800	143.1800	143.1800	FM-25KHz	CSQ	
7	21	143.1825	143.1825	143.1825	FM-25KHz	CSQ	
8	22	143.2125	143.2125	143.2125	FM-25KHz	CSQ	
9	23	143.2250	143.2250	143.2250	FM-25KHz	CSQ	
10	24	146.5350	146.5350	146.5350	FM-25KHz	CSQ	
11	25	147.0000	147.0000	147.0000	FM-25KHz	CSQ	
12	26	152.5000	152.5000	152.5000	FM-25KHz	CSQ	
13	27	156.0000	156.0000	156.0000	FM-25KHz	CSQ	
14	28	157.0000	157.0000	157.0000	FM-25KHz	CSQ	
15	29	157.5375	157.5375	157.5375	FM-25KHz	CSQ	
16	30	157.5425	157.5425	157.5425	FM-25KHz	CSQ	
17	31	157.5000	157.5000	157.5000	FM-25KHz	CSQ	
18	32	157.5500	157.5500	157.5500	FM-25KHz	CSQ	
19	33	160.0000	160.0000	160.0000	FM-25KHz	CSQ	
20	34	162.0000	162.0000	162.0000	FM-25KHz	CSQ	
21	35	162.1500	162.1500	162.1500	FM-25KHz	CSQ	
22	36	166.6750	166.6750	166.6750	FM-25KHz	CSQ	
23	37	167.3500	167.3500	167.3500	FM-25KHz	CSQ	
24	38	168.5000	168.5000	168.5000	FM-25KHz	CSQ	
25	39	168.6250	168.6250	168.6250	FM-25KHz	CSQ	
26	40	168.6500	168.6500	168.6500	FM-25KHz	CSQ	
27	41	171.9000	171.9000	171.9000	FM-25KHz	CSQ	
28	42	172.0000	172.0000	172.0000	FM-25KHz	CSQ	
29	43	173.9875	173.9875	173.9875	FM-25KHz	CSQ	
30	44	174.0000	174.0000	174.0000	FM-25KHz	CSQ	
31	47	162.4750	162.4750	N/A	FM-25KHz	CSQ	RX ONLY
32	48	162.4000	162.4000	N/A	FM-25KHz	CSQ	RX ONLY
33	49	162.5500	162.5500	N/A	FM-25KHz	CSQ	RX ONLY
34	50	161.7750	161.7750	N/A	FM-25KHz	CSQ	RX ONLY

TABLE 21 CONTINUED

UHF LO TYPE II MODULE							
ZONE"Z1"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	1	380.00CSW	380.0000	380.0000	FM-25KHz	CSQ	SCAN-1
2	2	425.00CSW	425.0000	425.0000	FM-25KHz	CSQ	SCAN-1
3	3	470.00CSW	470.0000	470.0000	FM-25KHz	CSQ	SCAN-1
4	4	425.00PLW	425.0000	425.0000	FM-25KHz	PL 103.5	
5	5	425.0DPLW	425.0000	425.0000	FM-25KHz	DPL 152	
6	6	380.00DIG	380.0000	380.0000	DIG 12.5KHz	NAC 293	
7	7	425.00DIG	425.0000	425.0000	DIG 12.5KHz	NAC 293	
8	8	470.00DIG	470.0000	470.0000	DIG 12.5KHz	NAC 293	
9	9	380.00CSN	380.0000	380.0000	FM-12.5KHz	CSQ	
10	10	425.00CSN	425.0000	425.0000	FM-12.5KHz	CSQ	
11	11	470.00CSN	470.0000	470.0000	FM-12.5KHz	CSQ	
12	12	425.00PLN	425.0000	425.0000	FM-12.5KHz	PL 103.5	
13	13	425.0DPLN	425.0000	425.0000	FM-12.5KHz	DPL 152	
14	14	452.00T/A	452.0000	457.0000	FM-25KHz	PL 107.2	
ZONE"Z2"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	15	380.0000	380.0000	380.0000	FM-25KHz	CSQ	
2	16	385.0000	385.0000	385.0000	FM-25KHz	CSQ	
3	17	392.0000	392.0000	392.0000	FM-25KHz	CSQ	
4	18	398.0000	398.0000	398.0000	FM-25KHz	CSQ	
5	19	403.0000	403.0000	403.0000	FM-25KHz	CSQ	
6	20	403.1125	403.1125	403.1125	FM-25KHz	CSQ	
7	21	406.1000	406.1000	406.1000	FM-25KHz	CSQ	
8	22	414.6500	414.6500	414.6500	FM-25KHz	CSQ	
9	23	418.1000	418.1000	418.1000	FM-25KHz	CSQ	
10	24	422.7375	422.7375	422.7375	FM-25KHz	CSQ	
11	25	430.0000	430.0000	430.0000	FM-25KHz	CSQ	
12	26	440.0250	440.0250	440.0250	FM-25KHz	CSQ	
13	27	441.5000	441.5000	441.5000	FM-25KHz	CSQ	
14	28	445.5000	445.5000	445.5000	FM-25KHz	CSQ	
15	29	446.4000	446.4000	446.4000	FM-25KHz	CSQ	
16	30	450.0000	450.0000	450.0000	FM-25KHz	CSQ	
17	31	454.0000	454.0000	454.0000	FM-25KHz	CSQ	
18	32	457.0000	457.0000	457.0000	FM-25KHz	CSQ	
19	33	458.5000	458.5000	458.5000	FM-25KHz	CSQ	
20	34	460.0000	460.0000	460.0000	FM-25KHz	CSQ	
21	35	461.5000	461.5000	461.5000	FM-25KHz	CSQ	
22	36	466.0000	466.0000	466.0000	FM-25KHz	CSQ	
23	37	469.5000	469.5000	469.5000	FM-25KHz	CSQ	
24	38	469.9875	469.9875	469.9875	FM-25KHz	CSQ	
25	39	470.0000	470.0000	470.0000	FM-25KHz	CSQ	

TABLE 22: ZONE CHANNEL ASSIGNMENT FOR UHF-LO SERIES II MODULES

UHF HI TYPE II MODULE							
ZONE"Z1"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	1	450.00CSW	450.0000	450.0000	FM-25KHz	CSQ	SCAN-1
2	2	481.00CSW	481.0000	481.0000	FM-25KHz	CSQ	SCAN-1
3	3	520.00CSW	520.0000	520.0000	FM-25KHz	CSQ	SCAN-1
4	4	481.00PLW	481.0000	481.0000	FM-25KHz	PL 103.5	
5	5	481.0DPLW	481.0000	481.0000	FM-25KHz	DPL 152	
6	6	450.00DIG	450.0000	450.0000	DIG 12.5KHz	NAC 293	
7	7	481.00DIG	481.0000	481.0000	DIG 12.5KHz	NAC 293	
8	8	520.00DIG	520.0000	520.0000	DIG 12.5KHz	NAC 293	
9	9	450.00CSN	450.0000	450.0000	FM-12.5KHz	CSQ	
10	10	481.00CSN	481.0000	481.0000	FM-12.5KHz	CSQ	
11	11	520.00CSN	520.0000	520.0000	FM-12.5KHz	CSQ	
12	12	481.00PLN	481.0000	481.0000	FM-12.5KHz	PL 103.5	
13	13	481.0DPLN	481.0000	481.0000	FM-12.5KHz	DPL 152	
14	14	462.00T/A	462.00T/A	467.0000	FM-25KHz	PL 107.2	
ZONE"Z2"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	15	450.0000	450.0000	450.0000	FM-25KHz	CSQ	
2	16	454.0000	454.0000	454.0000	FM-25KHz	CSQ	
3	17	457.0000	457.0000	457.0000	FM-25KHz	CSQ	
4	18	458.5000	458.5000	458.5000	FM-25KHz	CSQ	
5	19	460.0000	460.0000	460.0000	FM-25KHz	CSQ	
6	20	461.5000	461.5000	461.5000	FM-25KHz	CSQ	
7	21	466.0000	466.0000	466.0000	FM-25KHz	CSQ	
8	22	469.5000	469.5000	469.5000	FM-25KHz	CSQ	
9	23	469.9875	469.9875	469.9875	FM-25KHz	CSQ	
10	24	470.0000	470.0000	470.0000	FM-25KHz	CSQ	
11	25	481.0000	481.0000	481.0000	FM-25KHz	CSQ	
12	26	488.0000	488.0000	488.0000	FM-25KHz	CSQ	
13	27	489.0000	489.0000	489.0000	FM-25KHz	CSQ	
14	28	510.0000	510.0000	510.0000	FM-25KHz	CSQ	
15	29	511.5000	511.5000	511.5000	FM-25KHz	CSQ	
16	30	512.0000	512.0000	512.0000	FM-25KHz	CSQ	
17	31	516.5000	516.5000	516.5000	FM-25KHz	CSQ	
18	32	520.0000	520.0000	520.0000	FM-25KHz	CSQ	

TABLE 23: ZONE CHANNEL ASSIGNMENT FOR UHF-HI SERIES II MODULES

800 TYPE II MODULE							
ZONE"Z1"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	1	8510125CW	851.0125	851.0125	FM-25KHz	CSQ	SCAN-1
2	2	8660000CW	866.0000	866.0000	FM-25KHz	CSQ	SCAN-1
3	3	8689875CW	868.9875	868.9875	FM-25KHz	CSQ	SCAN-1
4	4	866000PLW	866.0000	866.0000	FM-25KHz	PL 103.5	
5	5	86600DPLW	866.0000	866.0000	FM-25KHz	DPL 152	
6	6	8510125DG	851.0125	851.0125	DIG 12.5KHz	NAC 293	
7	7	8660000DG	866.0000	866.0000	DIG 12.5KHz	NAC 293	
8	8	8689875DG	868.9875	868.9875	DIG 12.5KHz	NAC 293	
9	9	8510125CN	851.0125	851.0125	FM-12.5KHz	CSQ	
10	10	8660000CN	866.0000	866.0000	FM-12.5KHz	CSQ	
11	11	8689875CN	868.9875	868.9875	FM-12.5KHz	CSQ	
12	12	866000PLN	866.0000	866.0000	FM-12.5KHz	PL 103.5	
13	13	86600DPLN	866.0000	866.0000	FM-12.5KHz	DPL 152	
14	14	860.00T/A	860.0000	815.0000	FM-25KHz	PL 107.2	
ZONE"Z2"							
CHANNEL	PERS NO.	DISPLAY	RX FREQ.	TX FREQ.	DEV/MOD	PL/DPL	NOTES
1	15	765.0000	765.0000	765.0000	FM-25KHz	CSQ	
2	16	774.0000	774.0000	774.0000	FM-25KHz	CSQ	
3	17	795.00TX	775.0000	795.0000	FM-25KHz	CSQ	TX ONLY
4	18	815.50TX	775.0000	815.5000	FM-25KHz	CSQ	TX ONLY
5	19	851.0125	851.0125	851.0125	FM-25KHz	CSQ	
6	20	851.0250	851.0250	851.0250	FM-25KHz	CSQ	
7	21	851.0375	851.0375	851.0375	FM-25KHz	CSQ	
8	22	862.5375	862.5375	862.5375	FM-25KHz	CSQ	
9	23	856.3375	856.3375	856.3375	FM-25KHz	CSQ	
10	24	860.0000	860.0000	860.0000	FM-25KHz	CSQ	
11	25	866.0000	866.0000	866.0000	FM-25KHz	CSQ	
12	26	868.0125	868.0125	868.0125	FM-25KHz	CSQ	
13	27	868.9875	868.9875	868.9875	FM-25KHz	CSQ	

TABLE 24: ZONE CHANNEL ASSIGNMENT FOR 700-800Mhz SERIES II MODULES