

4.2.1 Switching between Dealer and User Configurations

From User to Dealer

1. Turn off the radio.
2. Press PTT, the *Monitor* button and the + button together, and turn on the radio.
3. LCD displays **PRO-CLR**.
4. To confirm switching to Dealer Configuration, press PTT. To cancel, press any other button.
5. Turn off the radio. The radio now operates in Dealer Configuration.

From Dealer to User

1. Turn off the radio.
2. Press PTT, the *Monitor* button and the + button together, and turn on the radio.
3. LCD displays **PROTECT**.
4. To confirm switching to User Configuration, press PTT. To cancel, press any other button.
5. Turn off the radio. The radio now operates in User Configuration.

IMPORTANT: If the radio is to be given to the customer, **REMEMBER** to switch it back to operate in User Configuration.

4.3 Entering Programming Mode

If the radio is turned on, turn it off. Press and hold the *MON*, and turn on the radio. A ringing tone is heard, which indicates that the radio is in Programming Mode. The *RW* and indicators are displayed.

4.4 Exiting Programming Mode

To exit Programming Mode, turn off the radio.

4.5 Accessing Programming Mode Parameters

In Dealer Configuration, Programming Mode parameters are grouped into three main categories: *RW* (Radio Wide), Channel (001 to XXX¹) and *VFO* (Variable Frequency Operation).

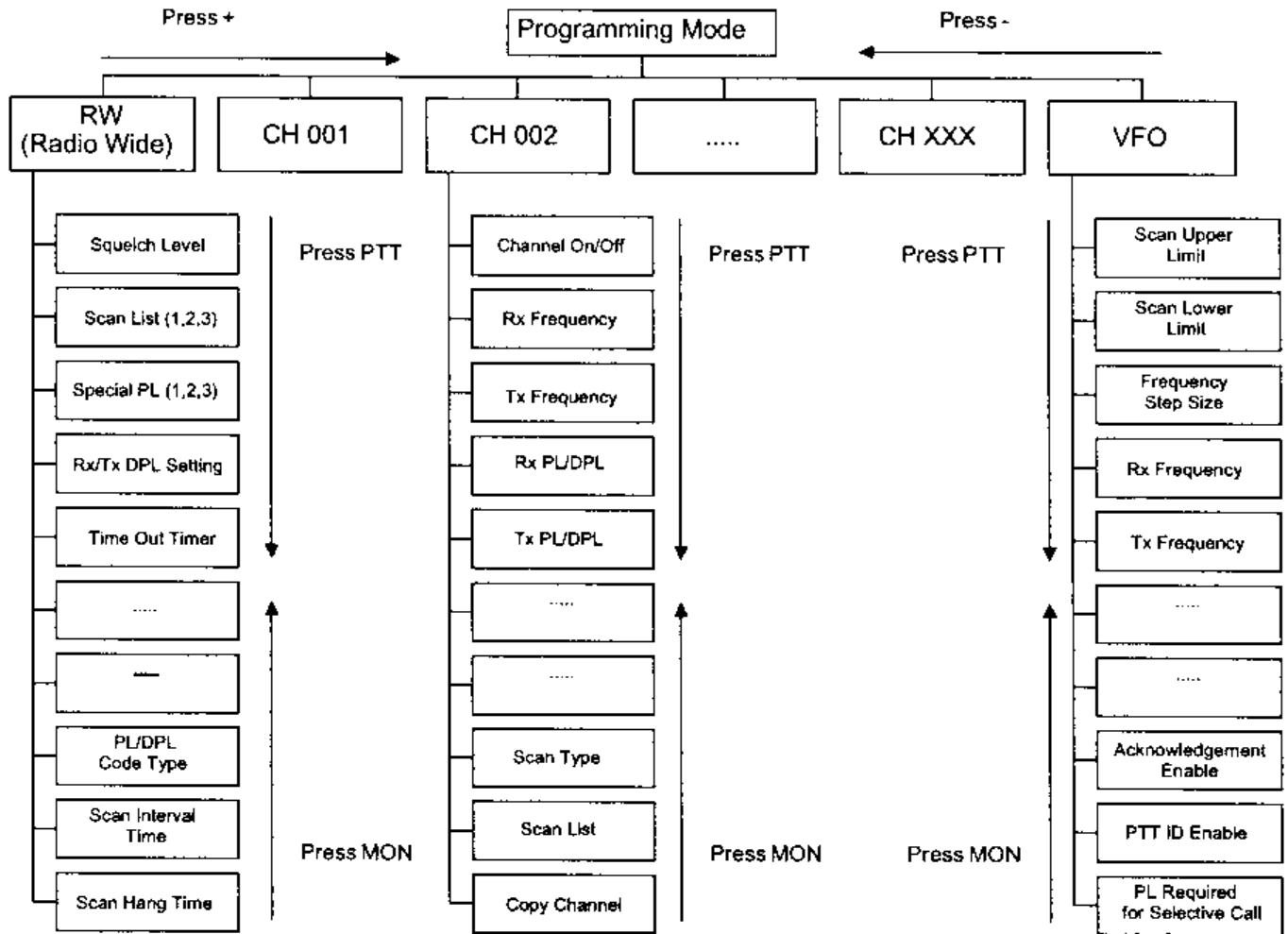
Use + or - buttons, to move from one category to another.

RW ↔ CH 001 ↔ CH 002 ↔ ... ↔ CH XXX¹ ↔ *VFO*

NOTE: Radio operating in User Configuration is only restricted to *RW* parameters.

Once you have selected the category, and wish to view its parameters, use PTT or *MON* to move from one parameter to the other, as shown in the next diagram.

1. XXX denotes the maximum number of channels supported by your radio model.



4.6 Editing RW (Radio Wide) Parameters

Radio Wide parameters are common to the whole radio. They become effective after you press PTT or MON.

RW Parameter	Description	Range	Default from Factory	Remarks
SQL-XX	Squelch Level	SQL-00 ... SQL-15	model dependent	<ul style="list-style-type: none"> Select low level when you need to receive very weak signal, and select high level when the communications distance is near, or your radio is receiving interference. Press + or - to select the desired squelch level.

RW Parameter	Description	Range	Default from Factory	Remarks
SCANLST1	Scan List 1	1-01-XXX, ..., 1-16-XXX, XXX denotes channel num- ber.	1-01-001, 1-02-002, ..., 1-16-016	<ul style="list-style-type: none"> • Up to 16 members per scan list. First member is assigned as Priority Channel if Priority Scan is started. • When scanning is started, only these 16 members will be scanned. • Each channel can choose to use Scan List 1, 2 or 3. • By default, all your channels select Scan List 1. If there is special need to use the other two scan lists for some of your channels, please consult your dealer. • Press + and - to move from one scan list member to another. • To include a channel into the scan list, enter the desired channel number using the keypad. • To erase a channel number from the scan list, press #. • Refer to "4.11.3 Setting Up a Scan List" on page 4A-21 for details.
SCANLST2	Scan List 2	2-01-XXX, ..., 2-16-XXX	2-01-001, 2-02-002, ..., 2-16-016	See Above.
SCANLST3	Scan List 3	3-01-XXX, ..., 3-16-XXX	3-01-001, 3-02-002, ..., 3-16-016	See Above.
PL1-XXX.X	Special PL Frequency 1	PL1-067.0, PL1-067.1, ..., PL1-254.9, PL1-255.0	PL1-120.0	<ul style="list-style-type: none"> • You may program any PL frequency from 067.0 Hz to 255.0 Hz, with 0.1 Hz resolution. This PL can then be used as receive and/or transmit PL for VFO or any channel. • Up to three special PL frequencies are available. • Use the keypad to enter the PL frequency directly. • Out-of-bound PL frequency will not be accepted. A negative tone is heard when attempted.
PL2-XXX.X	Special PL Frequency 2	PL2-067.0, PL2-067.1, ..., PL2-254.9, PL2-255.0	PL2-200.0	See above.
PL3-XXX.X	Special PL Frequency 3	PL3-067.0, PL3-067.1, ..., PL3-254.9, PL3-255.0	PL3-255.0	See above.

RW Parameter	Description	Range	Default from Factory	Remarks
RDPL-XXX	Rx DPL Setting	RDPL-NOR, RDPL-INV	RDPL-NOR	<ul style="list-style-type: none"> • Select RDPL-NOR to use the DPL codes listed under "4.10 DPL Codes" on page 4A-19. • Select RDPL-INV to invert the received DPL before decoding it. • Inverted coding allows for more traffic/usage on frequencies. • DPL Invert must be set on both receiving and transmitting radios for communication to occur.
TDPL-XXX	Tx DPL Setting	TDPL-NOR, TDPL-INV	TDPL-NOR	<ul style="list-style-type: none"> • Select TDPL-NOR to use the DPL codes listed under "4.10 DPL Codes" on page 4A-19. • Select TDPL-INV to encode DPL by inverting all the bits in the chosen DPL code, before sending it.
TOT-XXX	Time Out Timer	TOT-OFF, TOT-001, TOT-010	TOT-001	<ul style="list-style-type: none"> • This determines the maximum duration that you can transmit continuously. • Press + or - to select the desired time out timer.
BS-XXXX	Battery Saver	BS-OFF, BS-NORM, BS-ENH	BS-ENH	<ul style="list-style-type: none"> • Battery Saver helps to extend your battery life. • When enabled, it turns off the radio receiver circuitry periodically when no activity is detected. • BS-NORM (Normal) turns off less frequently. Select this if you want to save battery and are expecting Selective Calls. • BS-ENH (Enhanced) turns off the receiver for a longer duration. Select this if you want to maximize battery saving, and do not expect to receive any Selective Call. • Press + or - to select the desired battery saver setting.
BT-XXXX	Battery Type	BT-NIMH, BT-NICD, BT-ALK	BT-NIMH	<ul style="list-style-type: none"> • Select the type of battery that your radio is using: NIMH (Nickel Metal Hydride), NICD (Nickel Cadmium) or ALK (Alkaline). • Press + or - to select the desired battery type. NOTE: Not all battery types are available at the time of printing. Please consult your dealer.
BEEP-X	Alert Tone Volume	BEEP-OFF, BEEP-1, BEEP-2, BEEP-3	BEEP-3	<ul style="list-style-type: none"> • Select the alert tone volume needed. Select BEEP-OFF if you require a quiet operation, or BEEP-3 if you are working in a noisy environment. • Press + or - to select the desired alert tone volume setting.
PRM-XXX	Prime Channel Select	PRM-OFF, PRM-001, PRM-YYY, YYY denotes the highest channel number supported by your model.	PRM-OFF	<ul style="list-style-type: none"> • Prime Channel is a channel that you wish to spend most of your time monitoring. • The radio always powers up in the Prime Channel, if it is programmed. • The radio will always switch back to the Prime Channel if it is idle longer than the Prime Channel Return Hang Time (programmable) in other channel. • Press + or - to select the desired channel number as Prime Channel.

RW Parameter	Description	Range	Default from Factory	Remarks
PRMT-XXX	Prime Channel Return Hang Time	PRMT-OFF, PRMT-001, ..., PRMT-015	PRMT-010	<ul style="list-style-type: none"> This feature is only valid if a Prime Channel is programmed. XXX denotes the time that the radio will stay idle in a non-Prime channel before switching back to the Prime channel. Select OFF if you do not wish to switch to the Prime channel automatically. Unit is in seconds. Prime Channel Return Hang Time is therefore programmable from 1 second to 15 seconds in increments of 1 second.
PID-XXXX	PTT ID Transmit Manner	PID-OFF, PID-PRE, PID-POST, PID-BOTH	PID-PRE	<ul style="list-style-type: none"> Select how the PTT ID is transmitted: OFF (not transmitted), PRE (transmitted upon PTT press), POST (transmitted after PTT is released), BOTH (transmitted upon PTT press as well as after PTT is released). Press + or - to select the desired PTT ID transmit manner. NOTE: PTT ID has to be enabled on a per channel basis to enable transmission.
ST-XXX	PTT ID Sidetone	ST-OFF, ST-ON	ST-ON	<ul style="list-style-type: none"> When PTT ID Sidetone is enabled (ON), an alert tone is heard as soon as PTT is pressed, and when PTT ID is being sent. Press + or - to select ON or OFF.
SST-XXX	PTT ID Short Sidetone	SST-OFF, SST-ON	SST-OFF	<ul style="list-style-type: none"> When PTT ID short sidetone is enabled (ON), an alert tone is heard after PTT ID is sent. It indicates that the user is ready to start talking. Press + or - to select ON or OFF.
PTM-XXXX	Tx Pretime	PTM-0000, PTM-0025, ..., PTM-4000	PTM-0050	<ul style="list-style-type: none"> Pretime is the duration from which PTT is pressed to the time when PTT ID is ready to be sent. Adjust the pretime to suit the repeater's response time. Unit is in ms. Pretime is therefore programmable from 0 ms to 4000 ms in 25 ms steps. Press + or - to select the desired pretime.
LGT-XXXX	Backlight Select	LGT-AUTO, LGT-TOGL	LGT-AUTO	<ul style="list-style-type: none"> Selecting LGT-TOGL causes the <i>Backlight</i> button to toggle the ON/OFF status of the LCD backlight. Selecting LGT-AUTO causes the backlight to be turned off, if there is no keypress for more than 5 seconds. Press + or - to select the desired backlight setting.
PTT-ID	PTT ID	8 characters consist of 1, 2, ..., 9, 0, A, B, C, D, *, # and Pause.	<i>Blank</i>	<ul style="list-style-type: none"> PTT ID is sent when PTT is pressed. It serves as the identity of your radio. Press + or - to move the cursor to the appropriate character. Use the keypad to enter the ID. <i>Pause</i> can be entered by pressing * followed by #. Enter # 8 times to erase ID. Refer to "4.11.4 Programming an ID" on page 4A-21 for details.

RW Parameter	Description	Range	Default from Factory	Remarks
IND ID	Individual ID	8 characters consist of 1,2, ..., 9, 0, A, B, C, D, *, and #.	<i>Blank</i>	<ul style="list-style-type: none"> • IND ID is a unique ID for the radio. When the radio receives a Selective Call which matches its IND ID, the radio is said to have received an Individual Call. A ringing tone will sound. If ACK ID is enabled and programmed, the ACK ID will be sent. • Press + or - to move the cursor to the appropriate character. Use the keypad to enter the ID. Enter # 8 times to erase ID. • Refer to "4.11.4 Programming an ID" on page 4A-21 for details.
GROUP ID	Group ID	8 characters consist of 1,2, ..., 9, 0, A, B, C, D, *, and #.	<i>Blank</i>	<ul style="list-style-type: none"> • GROUP ID is an ID for the group where the radio belongs. When the radio receives a Selective Call which matches its GROUP ID, the radio is said to have received a Group Call. • Press + or - to move the cursor to the appropriate character. Use the keypad to enter the ID. Enter # 8 times to erase ID. • Refer to "4.11.4 Programming an ID" on page 4A-21 for details.
ALL ID	All ID	8 characters consist of 1,2, ..., 9, 0, A, B, C, D, *, and #.	<i>Blank</i>	<ul style="list-style-type: none"> • ALL ID is like an ID for all. When the radio receives a Selective Call which matches its ALL ID, the radio is said to have received an All Call. • Press + or - to move the cursor to the appropriate character. Use the keypad to enter the ID. Enter # 8 times to erase ID. • Refer to "4.11.4 Programming an ID" on page 4A-21 for details.
ACK ID	Acknowledgement ID	8 characters consist of 1,2, ..., 9, 0, A, B, C, D, *, and #.	<i>Blank</i>	<ul style="list-style-type: none"> • ACK ID is sent when the radio receives an Individual Call and Acknowledgement is enabled. • Press + or - to move the cursor to the appropriate character. Use the keypad to enter the ID. Enter # 8 times to erase ID. • Refer to "4.11.4 Programming an ID" on page 4A-21 for details.
ASP-XXXX	Button A Short Press Function	ASP-DISP, ASP-LGHT, ASP-LOCK, ASP-NDEL, ASP-NOP, ASP-OFS, ASP-PHN, ASP-PID, ASP-PL, ASP-PRM, ASP-PWR, ASP-SCAN, ASP-SQL, ASP-TA, ASP-VFO	ASP-PWR	<ul style="list-style-type: none"> • The four buttons (A, B, C and D) are programmable to meet the needs of the user. • The functions available include DISP (Channel Alias), LGHT (Backlight), LOCK (Keypad Lock), NDEL (Nuisance Channel Delete), NOP (No Operation), OFS (Offset Frequency), PHN (Phone Mode), PID (PTT ID Enable), PL (PL/DPL Enable), PRM (Prime Channel), PWR (Power Select), SCAN (Scan), SQL (Squelch Level), TA (Talkaround), VFO (VFO/Memory). • Press + or - to select the desired function for the button.

RW Parameter	Description	Range	Default from Factory	Remarks
ALP-XXXX	Button A Long Press Action	ALP-DISP, ... (See above)	ALP-PID	See above.
BSP-XXXX	Button B Short Press Action	BSP-DISP, ... (See above)	BSP-SQL	See above.
BLP-XXXX	Button B Long Press Action	BLP-DISP, ... (See above)	BLP-PHN	See above.
CSP-XXXX	Button C Short Press Action	CSP-DISP, ... (See above)	CSP-PL	See above.
CLP-XXXX	Button C Long Press Action	CLP-DISP, ... (See above)	CLP-LOCK	See above.
DSP-XXXX	Button D Short Press Action	DSP-DISP, ... (See above)	DSP-SCAN	See above.
DLP-XXXX	Button D Long Press Action	DLP-DISP, ... (See above)	DLP-NDEL	See above.
AC CODE	Access Code	16 characters consist of 1,2, ..., 9, 0, A, B, C, D, *, # and Pause.	<i>Blank</i>	<ul style="list-style-type: none"> • Access Code is dialed when you want to access the landline telephone network. • Once it is programmed, it can be sent by pressing PTT, followed by +, and then *. • <i>Pause</i> can be entered by pressing * followed by #. • Enter # 16 times, to completely erase entered code. • Refer to "4.11.5 Programming an Phone Number/ Access Code/De-access Code" on page 4A-22 for details.
DA CODE	De-access Code	16 characters consist of 1,2, ..., 9, 0, A, B, C, D, *, # and Pause.	<i>Blank</i>	<ul style="list-style-type: none"> • De-access Code is dialed when you want to disconnect from the landline telephone network. • Once it is programmed, it can be sent by pressing PTT, followed by +, and then #. • <i>Pause</i> can be entered by pressing * followed by #. • Enter # 16 times, to completely erase entered code. • Refer to "4.11.5 Programming an Phone Number/ Access Code/De-access Code" on page 4A-22 for details.

RW Parameter	Description	Range	Default from Factory	Remarks
TELNO-X	Telephone Number	16 characters consist of 1,2, ..., 9, 0, A, B, C, D, *, # and Pause.	Blank	<ul style="list-style-type: none"> • Up to nine telephone numbers can be programmed. • Once programmed into the memory, phone number can be speed dialed by pressing PTT, + and then X, where X denotes the telephone number location. • <i>Pause</i> can be entered by pressing * followed by #. • Enter # 16 times, to completely erase entered code. • Refer to "4.11.5 Programming an Phone Number/ Access Code/De-access Code" on page 4A-22 for details.
PL-XXXX	PL/DPL Display Type	PL-CODE, PL-FREQ	PL-CODE	<ul style="list-style-type: none"> • Select the display type of PL/DPL: FREQ and CODE • If FREQ has been selected, then the PL and DPL will be displayed in frequency and octal code format respectively. • If CODE has been selected, then the PL and DPL will be displayed in Motorola code number format (see "4.9 PL Frequencies and Codes" on page 4A-18 and "4.10 DPL Codes" on page 4A-19). • Press + or - to select CODE or FREQ.
SIT-XXXX	Scan Interval Time	SIT-0250, SIT-0500,, SIT-5000	SIT-2000	<ul style="list-style-type: none"> • Scan Interval Time is the duration the radio will spend on the landed channel before switching to scan the Priority Channel in Priority Scanning. • Unit is in ms. Scan Interval Time is therefore programmable from 250ms to 5000ms in 250ms steps. • Press + or - to select the desired Scan Interval Time.
SHT-XXXX	Scan Hang Time	SHT-0500, SHT-1000,, SHT-9500	SHT-7000	<ul style="list-style-type: none"> • Scan Hang Time is the duration the radio will stay on the landed channel without detecting any activity before it resumes scanning. • Unit is in ms. Scan Hang Time is therefore programmable from 500ms to 9500ms in 500ms steps. • Press + or - to select the desired Scan Hang Time.

The parameter defaults are subject to change without notice.

4.7 Editing Channel Parameters

Channel parameters only affect the channel where the parameters are modified. They become effective after you press PTT or MON.

Channel Parameter	Description	Range	Default from Factory	Remarks
CH-XX	Channel On/ Off	CH-OFF, CH-ON	CH-ON	<ul style="list-style-type: none"> • Select if the channel is enabled (ON) or disabled (OFF). • Disabled channel will not be accessible in Normal Mode. • Press + or - to select ON or OFF.

Channel Parameter	Description	Range	Default from Factory	Remarks
RXXX.XXXX	Channel Receive Frequency	Within the band limits of your model	model dependent	<ul style="list-style-type: none"> • This is the frequency that the channel will use to receive message. • You are not allowed to enter out-of-bounds frequencies. • Use the keypad to enter the frequency directly.
TXXX.XXXX	Channel Transmit Frequency	Within the band limits of your model	model dependent	<ul style="list-style-type: none"> • This is the frequency that the channel will use to transmit message. • You are not allowed to enter out-of-bounds frequencies. • Use the keypad to enter the frequency directly.
RPL-XXXX	Channel Receive PL/DPL	When PL-FREQ is selected in RW: OFF, 067.0, ..., 254.1, 023.D, 025.D, ..., 754.D, PL1, PL2, PL3 <i>OR</i> When PL-CODE is selected in RW: 000, 001, ..., 126, PL1, PL2, PL3	RPL-000 or RPL-OFF	<ul style="list-style-type: none"> • This is the PL or DPL code that the channel will use to unsquelch the receive message. • Two display formats are available: FREQ and CODE, selectable in RW. • OFF or 000 indicates that no PL/DPL is used for receive, i.e., radio operates in carrier squelch mode. • Press + or - to select the desired PL/DPL.
TPL-XXXX	Channel Transmit PL/DPL	When PL-FREQ is selected in RW: OFF, 067.0, ..., 254.1, 023.D, 025.D, ..., 754.D, PL1, PL2, PL3 <i>OR</i> When PL-CODE is selected in RW: 000, 001, ..., 126, PL1, PL2, PL3	TPL-000 or TPL-OFF	<ul style="list-style-type: none"> • This is the PL or DPL code that the channel will use to transmit the message. • Two display formats are available: FREQ and CODE, selectable in RW. • OFF or 000 indicates that no PL/DPL is used for transmit. • Press + or - to select the desired PL/DPL.

Channel Parameter	Description	Range	Default from Factory	Remarks
TOC-XXX	Turn Off Code/ Reverse Burst	TOC-OFF, TOC-ON	TOC-ON	<ul style="list-style-type: none"> • TOC or Reverse Burst serves to cause the receiving radio to mute its speaker before a loss of carrier is detected. • If enabled (ON), Turn Off Code will be sent if Tx DPL is enabled for the channel (Reverse Burst for Tx PL). • Press + or - to select ON or OFF.
XXX-POWR	Power Level	HI-POWR, LOW-POWR, ECO-POWR, RX ONLY	HI-POWR	<ul style="list-style-type: none"> • Select the power level required for the channel. • HI-POWR transmits at the maximum tuned power. LOW-POWR is typically 1W and ECO-POWR, less than 500mW. Set to RX ONLY if the channel is intended as a Receive Only Channel. • Press + or - to select the desired Tx power level.
BCL-XXX	Busy Channel Lockout	BCL-OFF, BCL-ON	BCL-OFF	<ul style="list-style-type: none"> • Select if the channel is to enable Busy Channel Lockout (BCL). • If BCL is enabled, the channel will check for channel activity before you can transmit. Detection of channel activity which is not from the same group would prevent radio from transmitting. • Press + or - to select the desired BCL setting.
CH-TAG	Channel Alias	0,1,...,9, A, B, ..., Z, +, -, /, *, #, Space.	001, 002, ..., 099	<ul style="list-style-type: none"> • Allows the channel number to be displayed as alias. • Press + or - to move to the character that needs to be edited. Enter the character using the keypad. • Refer to "4.11.2 Entering a Channel Alias" on page 4A-20 for details.
CS - XX.X	Channel Spacing	CS - 12.5, CS - 25.0	CS - 25.0	<ul style="list-style-type: none"> • Select the channel spacing for the channel. • Press + or - to select the desired channel spacing.
SC-XXX	Selective Call	SC-OFF, SC-ON	SC-OFF	<ul style="list-style-type: none"> • Select if Selective Call is to be enabled or disabled. • If enabled, the channel would adopt Signaling Squelch Mode, i.e., un-squelch only if radio is receiving carrier AND Selective Call (matching ID). • Press + or - to select the desired Selective Call setting.
ACK-XXX	Acknowledgement Enabled for Individual Call	ACK-OFF, ACK-ON	ACK-OFF	<ul style="list-style-type: none"> • Select if Acknowledgement is to be sent upon receiving an Individual Call. • If enabled, the preprogrammed Ack ID will be replied once the Individual Call is received and carrier loss is detected. • Press + or - to select the desired acknowledgement setting.
PID-XXX	PTT ID	PID-OFF, PID-ON	PID-OFF	<ul style="list-style-type: none"> • Select if PTT ID is to be sent upon PTT press. • If enabled, PTT ID would be sent according to the PTT ID Transmit Type selected in RW. • Press + or - to select the desired PTT ID transmit setting.

Channel Parameter	Description	Range	Default from Factory	Remarks
SCPL-XXX	PL Required for Selective Call	SCPL-OFF, SCPL-ON	SCPL-OFF	<ul style="list-style-type: none"> • Select if the channel Rx PL/DPL is required for qualifying the incoming Selective Call. • If enabled, incoming Selective Call would be checked for matching Rx PL/DPL before radio would unquench. • Press + or - to select the desired setting.
SCN-XXXX	Scan Type	SCN-NORM, SCN-PRTY	SCN-NORM	<ul style="list-style-type: none"> • Select the type of scan to be started if Scan button is pressed. • Two types of scan are available: Normal (NORM) and Priority (PRTY). • Press + or - to select the desired scan type.
SCN-LSTX	Scan List	SCN-LST1, SCN-LST2, SCN-LST3	SCN-LST1	<ul style="list-style-type: none"> • Select the scan list to be used by the channel. • Press + or - to select the desired scan list.
CH-COPY	Copy Channel	C-01-XXX, C-02-XXX, ..., C-16-XXX	N/A	<ul style="list-style-type: none"> • Allows the same channel parameters to be copied to up to 16 channels at one time. • Press + or - to move to the channel holder and then enter the channel number using the keypad. • Refer to "4.11.1 Copying All Parameters from One Channel to Other Channel(s)" on page 4A-20 for details.

The parameter defaults are subject to change without notice.

4.8 Editing VFO Parameters

VFO parameters are only valid when VFO is in use. They become active after you press PTT or MON.

Channel Parameter	Description	Range	Default from Factory	Remarks
UXXX.XXXX	VFO Scan Upper Limit	Within the band limits of your model	model dependent	<ul style="list-style-type: none"> • This is the upper-most frequency that VFO will scan. • You are not allowed to enter out-of-bound frequencies. • Use the keypad to enter the frequency directly.
LXXX.XXXX	VFO Scan Lower Limit	Within the band limits of your model	model dependent	<ul style="list-style-type: none"> • This is the lowest frequency that VFO will scan. • You are not allowed to enter out-of-bound frequencies. • Use the keypad to enter the frequency directly.

Channel Parameter	Description	Range	Default from Factory	Remarks
STEP XXX	Frequency Step Size	STEP 5, STEP 6.25, STEP 10, STEP 12.5, STEP 15, STEP 20, STEP 25	STEP 5	<ul style="list-style-type: none"> • Select the appropriate frequency step size for Rx/Tx frequency entry. • This step size will dictate the increment or decrement size when + or - is pressed in VFO. • VFO scan will also use this step size to scan the frequency band. Available step sizes are 5, 6.25, 10, 12.5, 15, 20 and 25 kHz. • Press + or - to select the desired frequency step size.
RXXX.XXXX	VFO Receive Frequency	Within the band limits of your model	model dependent	<ul style="list-style-type: none"> • This is the frequency the VFO uses to receive messages. • You are not allowed to enter out-of-bound frequencies. • Use the keypad to enter the frequency directly.
TXXX.XXXX	VFO Transmit Frequency	Within the band limits of your model	model dependent	<ul style="list-style-type: none"> • This is the frequency the VFO uses to transmit messages, when repeater offset is set to OFS-PROG (User Defined Tx Frequency). • You are not allowed to enter out-of-bound frequencies. • Use the keypad to enter the frequency directly.
OFS-XXX	Repeater Offset Frequency	OFS 000, OFS 001, OFS 100.	OFS 006 (VHF), OFS 050 (UHF)	<ul style="list-style-type: none"> • Select the repeater offset frequency to be used. • When repeater offset is set to OFS-POS, this offset frequency will be added to the VFO Rx frequency to transmit messages. • When repeater offset is set to OFS-NEG, this offset frequency will be deducted from the VFO Rx frequency to transmit messages. • Unit is in 100kHz. Repeater offset frequency therefore ranges from 0kHz to 10MHz in the increment of 100kHz. • Press + or - to select the desired repeater offset frequency.
RPT-XXXX	Repeater Offset	RPT-OFF, RPT-POS, RPT-NEG, RPT-PROG	RPT-OFF	<ul style="list-style-type: none"> • Selects the repeater offset to be used. • Select OFF if Tx frequency equals Rx frequency. • Select POS if Tx frequency is the sum of Rx frequency and the offset frequency. • Select NEG if Tx frequency is the difference of Rx frequency and the offset frequency. • Select PROG if Tx frequency equals the User Defined Tx frequency. • Press + or - to select the desired repeater offset.

Channel Parameter	Description	Range	Default from Factory	Remarks
RPL-XXXX	Channel Receive PL/DPL	When PL-FREQ is selected in RW: OFF, 067.0, ..., 254.1, 023.D, 025.D, ..., 754.D, PL1, PL2, PL3 OR When PL-CODE is selected in RW: 000, 001, ..., 126, PL1, PL2, PL3	RPL-000 or RPL-OFF	<ul style="list-style-type: none"> • This is the PL or DPL code that the VFO will use to unsquelch the receive message. • Two display formats are available: FREQ and CODE, selectable in RW. • OFF or 000 indicates that no PL/DPL is used for receive, i.e., radio operates in carrier squelch mode. • Press + or - to select the desired PL/DPL.
TPL-XXXX	Channel Transmit PL/DPL	When PL-FREQ is selected in RW: OFF, 067.0, ..., 254.1, 023.D, 025.D, ..., 754.D, PL1, PL2, PL3 OR When PL-CODE is selected in RW: 000, 001, ..., 126, PL1, PL2, PL3	TPL-000 or TPL-OFF	<ul style="list-style-type: none"> • This is the PL or DPL code that the VFO will use to transmit the message. • Two display formats are available: FREQ and CODE, selectable in RW. • OFF or 000 indicates that no PL/DPL is used for transmit. • Press + or - to select the desired PL/DPL.
TOC-XXX	Turn Off Code/Reverse Burst	TOC-OFF, TOC-ON	TOC-ON	<ul style="list-style-type: none"> • TOC or Reverse Burst serves to cause the receiving radio to mute its speaker before a loss of carrier is detected. • If enabled (ON), Turn Off Code will be sent if Tx DPL is enabled for the channel (Reverse Burst for Tx PL). • Press + or - to select ON or OFF.

Channel Parameter	Description	Range	Default from Factory	Remarks
XXX-POWR	Power Level	HI-POWR, LOW-POWR, ECO-POWR, RX ONLY	HI-POWR	<ul style="list-style-type: none"> • Select the power level required for the channel. • HI-POWR transmits at the maximum tuned power. LOW-POWR is typically 1W and ECO-POWR, less than 500mW. Set to RX ONLY if the channel is intended as a Receive Only Channel. • Press + or - to select the desired Tx power level.
BCL-XXX	Busy Channel Lockout	BCL-OFF, BCL-ON	BCL-OFF	<ul style="list-style-type: none"> • Select if the VFO is to enable Busy Channel Lockout (BCL). • If BCL is enabled, the VFO will check for activity before you can transmit. Detection of activity which is not from the same group would prevent radio from transmitting. • Press + or - to select the desired BCL setting.
CS - XXX	Channel Spacing	CS - 12.5, CS - 25.0	CS - 25.0	<ul style="list-style-type: none"> • Select the channel spacing for the VFO. • Press + or - to select the desired channel spacing.
SC-XXX	Selective Call	SC-OFF, SC-ON	SC-OFF	<ul style="list-style-type: none"> • Select if Selective Call is to be enabled or disabled. • If enabled, the VFO would adopt Signaling Squelch Mode, i.e., unsquelch only if radio is receiving carrier AND Selective Call (matching ID). • Press + or - to select the desired Selective Call setting.
ACK-XXX	Acknowledgement Enabled for Individual Call	ACK-OFF, ACK-ON	ACK-OFF	<ul style="list-style-type: none"> • Select if Acknowledgement is to be sent upon receiving an Individual Call. • If enabled, the preprogrammed Ack ID will be replied once the Individual Call is received and carrier loss is detected. • Press + or - to select the desired acknowledgement setting.
PID-XXX	PTT ID	PID-OFF, PID-ON	PID-OFF	<ul style="list-style-type: none"> • Select if PTT ID is to be sent upon PTT press. • If enabled, PTT ID would be sent according to the PTT ID Transmit Type selected in RW. • Press + or - to select the desired PTT ID transmit setting.
SCPL-XXX	PL Required for Selective Call	SCPL-OFF, SCPL-ON	SCPL-OFF	<ul style="list-style-type: none"> • Select if the VFO Rx PL/DPL is required for qualifying the incoming Selective Call. • If enabled, incoming Selective Call would be checked for matching Rx PL/DPL before radio would unsquelch. • Press + or - to select the desired setting.

The parameter defaults are subject to change without notice.