



ICOM IC-A6 PORTABLE RADIO BASIC OPERATION & CONTROLS

1. Press and Hold the "PWR" softkey for 3 seconds to turn power "ON".
2. Select a valid AM frequency from one of the memory locations or direct enter a valid AM frequency via the keypad.
3. Adjust the volume by turning the Volume Knob to desired level.
4. Adjust the Squelch by pushing the "SQL" softkey, then rotate the tuning dial to desired squelch level (00 - 24). (See Figure 1)
*Note: "SQL -- 0" is open squelch and "SQL -- 24" is tight squelch.
If the Squelch control is set too high, squelch may not open with weak signals.*

5. Push the "ANL" softkey to reduce pulse noise caused by engine ignitions or other outside interference.

The radio is ready to operate on the current frequency.

6. To Transmit, press and hold the Push-To-Talk (PTT).
Note: The display will indicate the radio is transmitting by displaying a "TX" icon on the top portion of the LCD. (See Figure 2)
7. Pause 1 second and talk in a normal voice into the microphone.
Note: Try to shield the microphone from wind and other loud background noises.
8. Release the PTT to stop transmitting and receive incoming transmissions.
Note: The display will indicate the radio is receiving by displaying a "RX" icon on the top portion of the LCD. (See Figure 3)

SQL -- 20
M1 5

Figure 1

TX
132.250
M1 5

Figure 2

RX
132.250
M1 5

Figure 3



ICOM A-6 Front View



ICOM IC-A6 PORTABLE RADIO SETTINGS/OPTIONS

MANUAL FREQUENCY ENTRY USING THE KEYPAD:

- Press and Hold the "**PAWR**" softkey for 3 seconds until the power turns **ON**.
- Push the "**CLR**" softkey to select **frequency mode**.
- Enter a valid 5 digit AM frequency and press the "**ENT**" key. **(118.000 through 136.975)**
- Display will indicate the current selected frequency. **(See Figure 1)**

*Note: Pushing the "**ENT**" key enters consecutive zero digits. Only "2", "5", "7", and "0" can be entered as the 5th and final digit.*

125.550

Figure 1

MANUAL FREQUENCY ENTRY USING THE TUNING DIAL:

- Press and Hold the "**PAWR**" softkey for 3 seconds until the power turns "**ON**".
- Push the "**CLR**" softkey to select **frequency mode**.
- Rotate the tuning dial to set the desired frequency. **(See Figure 1)**

*Note: To select 1Mhz tuning step, press the "**F**" softkey once, Push the "**F**" softkey again to return to normal tuning.*

PROGRAMMING A MEMORY CHANNEL:

- Set the desired frequency using the keypad, the radio must be in frequency mode to enter new frequency.
- Press the "**F**" soft key, followed by the "**MR**" softkey. The LCD will flash the "**Mx XX**" in the lower display. **(See Figure 2)**
- Select a memory bank (**0-9**) to program by pressing the "**F**" softkey followed by the "**0**" softkey, then selecting a desired Bank using the tuning dial. Press the "**ENT**" softkey once the desired bank is located. *Note: Default is Bank-0 (See Figure 3)*
- Select a memory channel (**00-19**) to be programmed using the tuning dial.
- Press the "**ENT**" key to enter that frequency into the memory location. **(See Figure 4)**

125.550
M0 0

Figure 2

BANK -- 0

Figure 3

125.550
M2 5

Figure 4

MEMORY CHANNEL SELECTION:

- Push the "**MR**" key to select memory mode.
- Select the desired memory location by rotating the tuning dial to desired memory channel and press the "**ENT**".
- Display will indicate the corresponding frequency of the memory location including bank location. **(See Figure 4)**

*Note: To CLEAR the memory contents, select the memory channel to be cleared. Press the "**F**" softkey, then push and hold the "**CLR**" softkey for 2 seconds.*

SELECTING A BANK:

- Press the "**F**" softkey, followed by the "**0**" softkey.
- Select the desired bank (0-9) using the top tuning dial.
- Press the "**ENT**" softkey to make that bank active.

RECALL FUNCTION:

Recall stores the last 10 frequencies used in the radio.

To recall a used frequency, press the "**MR**" softkey to find the desired used frequency. **(See Figure 5)**

*Note: To CLEAR the recall contents, select the recall channel to be cleared. Press the "**F**" softkey, then push and hold the "**CLR**" softkey for 2 seconds.*

122.900
r 3

Figure 5

KEYPAD LOCK FUNCTION

To Enable Key Lock, press the "**F**" key, then press the "**L**" key (**Key Lock**) to turn ON the function. **(See Figure 6)**

- Display indicates that the key Lock functions is enabled by displaying the "**🔒**" icon in the upper part of the LCD.

To Disable Key Lock, repeat the process.

Note: The lock function prevents accidental frequency changes & accidental function activation.

125.550
ANL
M2

Figure 6

AUTOMATIC NOISE LIMITER (ANL) FUNCTION:

To Enable ANL, press the "**ANL**" softkey.

- Display indicates that the ANL function is enabled by displaying "**ANL**" icon in the lower part of the LCD. **(See Figure 7)**

To Disable ANL, press the "**ANL**" softkey.

Note: The ANL function reduces pulse noise such as ignition noise, computer, lights and other outside interference.

125.550
ANL
M2 5

Figure 7

BACK LIGHT FUNCTION:

To Enable the LCD Back Light, press the Light side button. (**Bottom side button**)

To Disable the LCD Back Light, Press the Light side button.

*Note: The Light button turns on the LCD back light and the keypad lighting.
The light will stay on until it is disabled.*

SETTING SQUELCH LEVEL:

To Set Squelch Level, push the "**SQL**" softkey, then rotate the tuning dial to desired squelch level (**00 - 24**). **(See Figure 8)**

Note: "SQL -- 0" is open squelch and "SQL -- 24" is tight squelch. (NIICD suggested level is 20)

SQL -- 20
M2 5

Figure 8



DPH/DPHx PORTABLE RADIO BASIC OPERATION & CONTROLS

1. Turn power ON by turning the ON/OFF Volume Knob clockwise.
Note :A beep indicates the radio is operational. The LCD will briefly indicate the current group before indicating the current channel.
2. Select a group number by pressing the “#” key and entering a 2-digit number followed by the “ENT” key.
3. Select a channel by turning the **Channel Select Knob** to one of the 16 available positions.
4. Adjust the volume by turning the **Squelch Knob clockwise** to open the **squelch** and set the volume to desired level.
5. Adjust the Squelch by turning the Squelch Knob counterclockwise until the squelch closes.

Note: This is the Threshold Squelch Setting.

Turn the squelch Knob fully counterclockwise into the detent position to place the RX in Code Guard. RX must have a tone programmed in order for RX Code Guard to function properly. Putting the RX in Code Guard, will enable the RX not to open squelch unless it receives the correct tone.

The radio is now ready to RECEIVE on the current group and channel.

6. To transmit, press and hold the Push-To-Talk (**PTT**) button on the side of the radio.
Note: The Transmit Indicator Light should glow red while transmitting. If not, the battery may be low or the channel is RX only or busy.
7. Pause 1 second and talk in a normal voice into the microphone.
Note: Try to shield the microphone from wind and other loud background noises for clearer transmissions.
8. Release the PTT to stop transmitting and receive incoming transmissions.





DPH/DPHx PORTABLE RADIO SETTINGS/OPTIONS

ADD/REMOVE CHANNELS FROM SCAN LIST:

To **ADD** channel to Scan List, select a channel to scan with the channel select knob and press the “ENT” key.

- LCD will display “SCN” in the upper section, indicating that the current displayed channel is in the scan list. (See Figure 1)

To **REMOVE** channel from Scan List, select the channel to remove with the channel select knob and press the “CLR” key.

- “SCN” will be removed from the upper section of the LCD.

Note: Scan must be disabled in order to add or remove channels from the scan list, by toggling the “SCAN” and “PRI” toggle switches in the down position. (Toward the front of the radio)

ADD PRIORITY SCAN CHANNEL:

To select a channel as a **Priority Scan Channel**, select a channel and press the “PRI” key. (See Figure 2)

- LCD will display “PR” in the upper section, indicating that the current displayed channel is now the Priority 1 Channel.

Note: Scan must be disabled in order to add or remove the Priority 1 Channel, by toggling the “SCAN” and “PRI” toggle switches in the down position. (Toward the front of the radio)

Priority 2 Channel can only be changed in the “CH 00” parameters. (See “CH 00” Settings)

Note: Enabling PRI Scan will only scan the Priority Channel(s). In order to scan the scan list channels and the Priority Channel(s), both the Scan and PRI Toggle switches must be enabled.

NIICD default is set to all PRI off.

ENABLE/DISABLE SCAN/PRIORITY SCAN:

Enable Scan, by toggling the **Scan Toggle Switch** to the up position. (Toward the back of the radio) (See Figure 3)

- LCD will indicate scan is enabled by flashing “-- --” in the right side of the display if alphanumeric mode is disabled.
or
- LCD will indicate scan is enabled by flashing “SCN” in the upper part of the display if alphanumeric mode is enabled.

Disable Scan, by toggling the **Scan Toggle Switch** to the down position. (Toward the front of the radio)

Enable Priority Scan, by toggling the **PRI Toggle Switch** to the up position. (Toward the back of the radio)

- LCD will indicate Priority Scan is enabled by flashing “-- --” in the right side of the display and with a “PR” icon in the top portion of the display if alphanumeric mode is disabled. (See Figure 4)
or
- LCD will indicate Priority Scan is enabled by flashing “SCN” in the upper part of the display if alphanumeric mode is enabled.

Disable Priority Scan, by toggling the **PRI Toggle Switch** to the down position. (Toward the front of the radio)

Note: Depending on what type of Priority Scan Mode is enabled, the LCD will display and operate differently for each priority mode. Check the priority mode in the “CH 00” Group Settings.

NIICD Default is set to Priority Mode A, Priority Channels follows the selected channel.

CHANGING GROUPS:

To **Change Groups**, press the “#” key followed with the 2-digit number of the desired group and then press “ENT” or wait 3 seconds. (See Figure 5)

Note: All DPH/DPHx NIICD model radios have a 25 group capacity.

Groups 1-4 contain the Standard NIICD Frequencies.

TX USER SELECTABLE TONES:

To **Enable Selectable Tone**, press one of number keys (1-9) to select a preprogrammed TX User Selectable Tone.

- Display will indicate a TX User Selectable Tone is enabled by displaying the “CG” icon in the top portion of the LCD.
- If Alphanumeric Mode is Disabled, display will also indicate the selected TX User Tone. (See Figure 6)

To **Disable Selectable Tone**, press the “0” key on the keypad.

Note: User Selectable Tone Function can be enabled through the “CH 00” functions.

NIICD default is TX User Selectable Tones are Disabled

HI/LOW POWER SETTINGS:

Select Low Power by toggling the **LO/HI Toggle Switch** to the up position. (Toward the back of the radio)

Select High Power by toggling the **LO/HI Toggle Switch** to the down position. (Toward the front of the radio)

Note: NIICD Low Power setting is set to 2.0 Watts, High Power setting is set to 5.0 Watts. (Current draw dependent)

ENABLE/DISABLE KEYPAD:

To **Disable keypad**, press and hold the “FNC” key until the LCD displays “LOCKED”. (See Figure 7)

To **Enable keypad**, press and hold the “FNC” key until the LCD displays “UNLOCKED”. (See Figure 8)



Figure 1



Figure 2

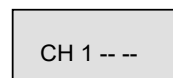


Figure 3

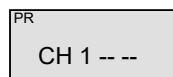


Figure 4

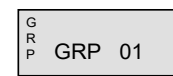


Figure 5

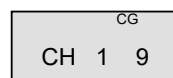


Figure 6



Figure 7



Figure 8



DPH/DPHx PORTABLE RADIO ANALOG PROGRAMMING GUIDE

- Turn on radio and select a group and channel you wish to program
 - Select a group number by pressing the “#” key and entering a 2-digit number followed by the “ENT” key.
 - Select a channel number by turning the **Channel Select Knob** to one of the 16 available positions.
- Access Program Mode *(See Figures 1 and 2)*
 - Insert a programming plug into the side connector of the radio.
 - Press and hold** the red Master Switch on the programming plug.
 - Simultaneously Press and hold the “FCN” key for approximately three seconds until the LCD displays “-- -- ID”.
 - Enter a valid password. NIICD default password is set to “000000”
 - Press the “ENT” key to proceed into the programming mode.
 - If the correct password was entered, the LCD displays “CH 00”.
- Once in Program Mode, select a 2-digit channel number (**01-16**) to program using the keypad.
Note: Once a channel is entered, pressing the “FNC” key will scroll through that particular channel settings.
- Once the desired channel is entered and displayed, the **Bandwidth Setting** can be set.
 - Press the “#” key to toggle between **Wide-Band** and **Narrow-Band**. *(See Figure 3)*
 - Once the Bandwidth is set, press the “FCN” key to scroll to the next programming parameter.*Note: The “N” indicates that the channel is set for Narrow-Band operation, No indication for Wide-Band operation.*
- The LCD will display “PRG RX 162.5500” for programming the **RX Frequency**. *(See Figure 4)*
 - Press the “CLR” key to clear the current frequency and enter a valid **VHF RX frequency** and press the “ENT” key.
- The LCD will display “PRG RX MODE-A” for programming the **RX Mode**. *(See Figure 5)*
 - Press the “PRI” key to toggle between “A”, “D”, or “M”. Select “A” press the “ENT” key.*Note: A=Analog Channel, D=Digital Channel, and M=Mixed Mode Channel*
- The LCD will display “PRG RX CG 000.0” for programming the **RX Code Guard**. *(See Figure 6)*
 - Press the “CLR” key to clear the tone and enter a valid **RX Tone** using the keypad and press the “ENT” key.*Note: Enter “000.0” for no tone.*
- LCD will display “PRG RX IDCG NAC0659” for programming the **RX Network Access Code**.
This is a Digital Channel Function, press the “ENT” key to skip to the next programming parameter.
- The LCD will display “PRG RX ID SQL--NRM” for programming the **Squelch Setting**. *(See Figure 7)*
 - Press the “PRI” key to toggle between “NRM”, or “SEL”. Select “NRM” and press the “ENT” key.*Note: “SEL” is used only in Digital or Mixed Mode to use Talk Groups or Individual Call Functions.*
- LCD will display “PRG TX 168.05000” for programming the **TX Frequency**. *(See Figure 8)*
 - Press the “CLR” key to clear the current frequency and enter a valid **VHF TX frequency** and press the “ENT” key.
- LCD will Display “PRG TX MODE-A” for programming the **TX Mode**. *(See Figure 9)*
Press the “PRI” key to toggle between “A”, “D”, or “M”. Select “A” and press the “ENT” key.
Note: A=Analog Channel, D=Digital Channel, and M=Mixed Mode Channel
- LCD will display “PRG TX CG 110.9” for programming **TX Code Guard**. *(See Figure 10)*
 - Press the “CLR” key to clear the current tone and enter a valid **TX Tone** using the keypad and press the “ENT” key.*Note: Enter “000.0” for no tone.*
- LCD will display “PRG TX IDCG NAC0659” for programming the **TX Network Access Code**.
This is a Digital Channel Function, press the “ENT” key to skip to the next programming parameter.
- LCD will display the “PRG ID TG00001” for programming the **TX Talk Group ID**.
This is a Digital Channel Function, press the “ENT” key to skip to the next programming parameter.
- LCD will display the channel name/label, press the “ENT” key to keep name/label and finish programming the channel or press the “CLR” key to change the name/label for that channel. *(See figure 11)*
- Changing Channel Label
 - Press the “CLR” key to clear the label.
 - Press the “PRI” key to scroll through available Alphanumeric Characters.
 - Press the “FCN” key to enter a character and shift to the left for the next character.
 - Repeat the process until desired name/label is entered and press the “ENT” key.*Note: LCD is an 8 character display. NIICD default is set to display the numeric characters only in the “CH 00” parameters.*
- Once the label is entered, the program will bring the first channel parameter up, channel programming is complete.
At this point the user may select another channel to program by starting on step 3 or exit the program mode by cycling power to the radio.

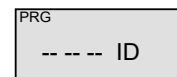


Figure 1

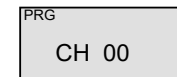


Figure 2

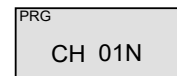


Figure 3

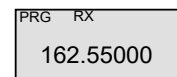


Figure 4

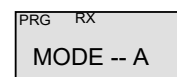


Figure 5

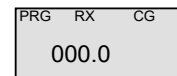


Figure 6

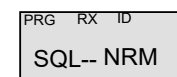


Figure 7

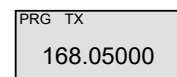


Figure 8

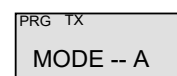


Figure 9

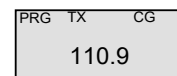


Figure 10



Figure 11



DPH/DPHx PORTABLE RADIO “CH 00” SETTINGS

1. Select a group you wish to program.
2. Access the Program Mode to enter the “CH 00” Settings. (See Figure 1)
3. Once “CH 00” is displayed, press the “FCN” key to scroll to the first “CH 00” parameter.
4. The display will indicate “PRG P000000” for the **Group Password**. (See Figure 2)
 - Press the “ENT” if no change is required and advance to the next programming parameter*Note: NIICD does not recommend changing the group password. (Default password is set to “0000000”)*
5. The display will indicate “PRG ID 0000000” for the **Group Automatic Numeric Identification** parameter (ANI). (See Figure 3)
 - This is used as either a radio management number or transmitted as a DTMF tone. Press the “ENT” or “FCN” key to advance to the next field. (NIICD default is set to “0000000”)
5. The display will indicate “PRG TX 160 SEC” for the **Transmit Tim-Out Timer (TOT)** duration. (See Figure 4)
 - To change the TOT, press the “PRI” key to increase the TOT duration and press the “ENT” to store value and advance to the next field. (NIICD default is set to “120 SEC”) A TOT value of 0.0 Seconds, disables the TOT.
6. The display will indicate “PRG SCN 2.0 SEC” for the **Scan Delay Time**. (See Figure 5)
 - To change the Scan Delay Time, press the “PRI” key to increase the duration and press the “ENT” key to store and advance to the next field. (NIICD default is set to “2.0 SEC”)
7. The display will indicate “PRG PR1 OFF” for programming a **Priority 1 Channel**. (See Figure 6)
 - To change the Priority 1 Channel, press the “PRI” key to select a channel or turn OFF the function and press the “ENT” key to store and advance to the next field. (NIFC Default is set to “OFF”)*Note: Priority 1 Channel can be programmed as a fixed channel, selected by the channel select knob, or OFF. If the PRI 1 is set as fixed, it can be changed through the front keypad by pressing the “PRI” key.*
8. The display will indicate “PRG PR2 OFF” for programming the **Priority 2 Channel**. (See Figure 7)
 - To change the Priority 2 Channel, press the “PRI” key to select a channel or turn OFF the function and press the “ENT” key to store and advance to the next field. (NIFC Default is set to “OFF”)*Note: Priority 2 Channel can only be changed via the “CH 00” parameters.*
7. The display will indicate “PRG 1--12345” for the **Group 1 Functions**. (See Figure 8)
 - The group functions can be enabled or disabled by pressing the number key corresponding to that function.

CH 00 Group 1 Functions NIICD default is “1-12345” (See Figure 8)

- 1-12345.....**Battery Saver Inhibit** (Disables the Battery Saver Function for current drain on battery life.)
- 1-12345.....**Group Scan** (Enables the current group to be scanned while in Group Scan Mode.)
- 1-12345.....**TX on PRI 1** (Enables transmission on PRI 1 when PRI Scan is Enabled.)
- 1-12345.....**Priority 1 Lock** (Enables the Lock out of the “PRI” key, so user can not change the Priority 1 Channel.)
- 1-12345.....**Scan List Lock** (Enables the Scan List Lock out, so user can not add/remove channels from the scan list.)

CH 00 Group 2 Functions NIICD default is “2-12345” (See Figure 9)

- 2-12345.....**User CH Code Guard** (Enables keypad to independently select a Channel Code Guard value from programmed channels.)
- 2-12345.....**Busy Channel Indicator** (Yellow LED illuminates when signal is received on selected channel.)
- 2-12345.....**Busy Channel Lockout** (Yellow LED illuminates and PTT is disabled when a signal is received on selected channel.)
- 2-12345.....**Busy Channel Lockout/Over-ride** (Same as Busy Channel Lockout, but PTT can be activating the Squelch Code Guard.)
- 2-12345.....**ANI** (Enables the ANI ID number to be transmitted with each press of the PTT as a DTMF tone.)
- 2-12345.....**Manual DTMF Encoder** (Enables keypad for manual DTMF operation.)
- 2-12345.....**Manual DTMF/ANI Encoder** (Enables the ANI ID number to be transmitted only after the “ENT” key is pressed during TX.)

CH 00 Group 3 Functions NIICD default is “3-12345” (See Figure 10)

- 3-12345.....**Reserved**
- 3-12345.....**Reserved**
- 3-12345.....**LCD Back light ON Display Change** (LCD back light will illuminate each time the display receives an input.)
- 3-12345.....**LCD Back light ON Key Press** (LCD back light will illuminate each time a key is pressed.)
- 3-12345.....**Alphanumeric Mode** (LCD will display Alphanumeric Characters.)

10. After “CH 00” Group 3 Functions, the display will indicate “PRG LITE OFF” for the **LCD Back light Duration Setting**.
 - To change the back light duration, press the “PRI” key to select an available setting and press the “ENT” key to store and advance to the next field. (NIICD default is “OFF”) (See Figure 11)

11. The display will indicate the current group label. (See Figure 12)
 - Press the “ENT” key to advance back to the “CH 00” starting point.
 - At this point, pressing the “FNC” key repeatedly will scroll down each value of the “CH 00” settings for that channel.
 - If no changes are needed, exit the program mode by cycling power to the radio or continue with channel programming by selecting another channel to program.

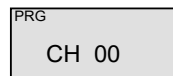


Figure 1

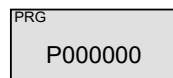


Figure 2

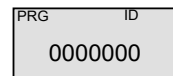


Figure 3

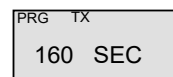


Figure 4

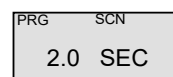


Figure 5

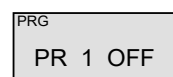


Figure 6

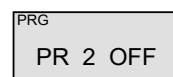


Figure 7

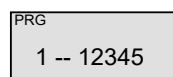


Figure 8

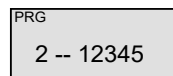


Figure 9

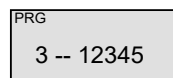


Figure 10



Figure 11



Figure 12



DPH/DPHx PORTABLE RADIO CLONING INSTRUCTIONS

CLONING RADIO SETTINGS

1. Assure that both radios are off and attach the Master end of the cloning cable to the side connector of the Master radio.
 - Attach the Clone/Slave end of the cloning cable to the side connector of the radio being cloned to.
2. Turn both radios on.
Note: Assure each radio is in the corresponding group before continuing with the cloning process.
3. Put the Master radio in programming mode by holding down the **Master Switch** and **simultaneously** pressing the **"FCN"** key on the master radio until the LCD displays (-- -- -- ID). (See Figure 1)
4. Enter a valid password, if requested, and press the **"ENT"** key. (**NIICD default Password is set to "000000"**)
 - The LCD will display **"CH 00"** if the correct password was entered. (See Figure 2)
5. Press the **"*"** key on the Master radio.
 - The LCD will flash **"PROG"**, indicating that the radio is ready to download. (See Figure 3)
6. Press the **"FCN"** key to download to clone/slave radio.
 - **If the clone was successful**, the Master radio will resume flashing **"PROG"** on the display. (See Figure 3)
 - **If the clone was unsuccessful**, the Master radio will flash **"FAIL"** followed by continuous beeps. (See Figure 4)

Note: To stop "FAIL" mode, press the "CLR" key, turn off the radios, and start the cloning process again.

When the Master radio downloads to a clone, the Scan List and Priority Channel designations are also downloaded to the clone radio.

Group Password are also downloaded between DPH and GPH Model radios, NIICD recommends not modifying the Group Password when programming radios.

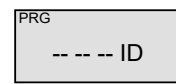


Figure 1

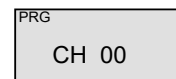


Figure 2

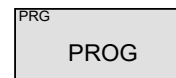


Figure 3

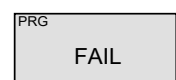


Figure 4



DPHx Cloning Connections



KNG P150S PORTABLE RADIO BASIC OPERATION & CONTROLS

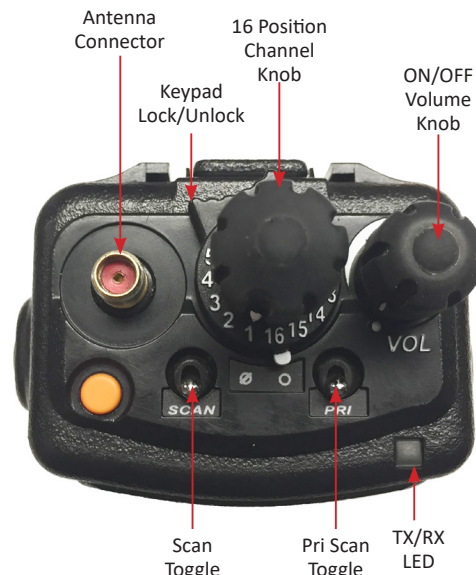
1. Turn the power **ON** by turning the “**VOL**” Knob clockwise.
The LCD will indicate the current Zone and Channel label.
2. Select a zone number by pressing the “**Zone**” softkey. Enter the zone number via the key pad and press the “**OK**” softkey.
OR
Press the “**Zone**” softkey. Press the **UP/Down** soft keys to highlight desired zone and press the “**OK**” softkey.
3. Select a channel by turning the Channel Select Knob to one of the 16 available positions.
4. Adjust the volume by pressing the “**Monitor**” button once to open the squelch and set the volume to desired level, press the “**Monitor**” key once more to close Squelch.

The radio is now ready to operate on the current group and channel.

6. To transmit, press and hold the Push-To-Talk (PTT) button on the side of the radio.
*Note: The Transmit Indicator Light should glow red while transmitting.
If not, the battery may be low, the channel is RX only or busy.*
7. Pause 1 second and talk in a normal voice into the microphone.
Note: Try to shield the microphone from wind and other loud background noises for clearer transmissions.
8. Release the **PTT** to stop transmitting and receive incoming transmissions.



KNG P150s Front View



KNG P150s Top View



KNG P150s PORTABLE RADIO SETTINGS/OPTIONS

CHANGING ZONES:

To change groups, press the “Zone” softkey. Enter the zone number via the key pad and press the “ENT” softkey. (See Figure 1 & 2)

OR

Press the “Zone” softkey. Press the UP/Down keypad keys to desired zone and press the “ENT” softkey. (See Figure 1 & 2)

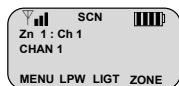


Figure 1

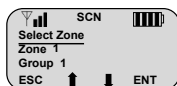


Figure 2

ENABLING/DISABLING SCAN:

To Enable Scan - Toggle the “Scan Toggle” switch towards the front of the radio.

- The display will indicate the radio is in Scan Mode by displaying a flashing “SCN” icon on the LCD. (See Figure 1)

To Disable Scan - Toggle the “Scan Toggle” switch towards the back of the radio.

ENABLING/DISABLING PRIORITY SCAN:

To Enable Priority Scan - Toggle the “PRI Toggle” switch towards the front of the radio.

- The display will indicate the radio is in Priority Scan Mode by displaying a flashing “SCN” icon on the LCD.

To Disable Priority Scan - Toggle the “PRI Toggle” switch towards the back of the radio.

ADD/REMOVE CHANNEL FROM SCAN LIST:

To Add a Channel - Press the “Menu” softkey, scroll down to “Scan List” using the up/down softkeys and press the “ENT” softkey.

Select the channel to scan using the up/down softkeys, then press the “+/-” softkey to add or delete the channel from the scan list.

Note: An “+” next to the select channel indicates the Channel is in the Scan List. (See Figure 3)

Press the “ESC” softkey twice to return to normal operation.

To Remove a Channel - Repeat the process and select “-”.

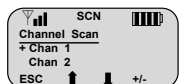


Figure 3

TX POWER SELECTION:

Low Power Selection - Press the “LPW” softkey to enable low power setting.

- Once enabled, a black background around the “LPW” display will be outlined. (See Figure 4)

High Power Selection - Press the “LPW” softkey to disable low power setting. (See Figure 5)

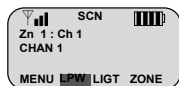


Figure 4

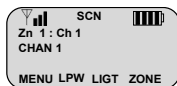


Figure 5

LOCKING KEYPAD:

To Lock Keypad - Turn the top bezel button located on the top of the radio to the “⊘” position.

- If any keys on the front panel are pushing while the keypad is locked, the LCD will display the following “Keys Locked” message. (See Figure 6)

To Unlock the Keypad - Turn the top bezel button to the “○” position.

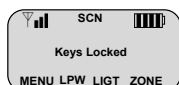


Figure 6



KNG P150s PORTABLE RADIO ANALOG PROGRAMMING GUIDE

1. Turn on the radio.
2. Access the Program Mode (See Figure 1 and 2)
 - Press the “Menu” softkey.
 - Scroll down using the Up/Down softkeys to highlight “Keypad Prog” and press the “ENT” softkey.
 - Highlight “Keypad Prog” and press the “ENT” softkey.
 - Enter the 7-digit NIICD password and press the “ENT” softkey. *NIICD default password is set to “0000000”*

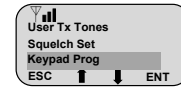


Figure 1

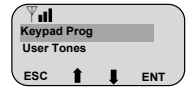


Figure 2

3. Once in Program Mode, scroll up/down to highlight “Channels” and press “ENT”.
4. Scroll to the desired Zone/Group using the up/down softkeys and press “ENT”.
5. Scroll to the desired Channel using the up/down softkeys and press “ENT”.
6. Highlight “Rx Freq” and press “ENT”. (See Figure 6)
 - Press the “CLR” softkey and enter a valid RX Frequency and press “ENT”.

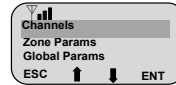


Figure 3

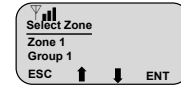


Figure 4

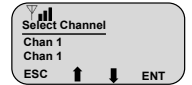


Figure 5

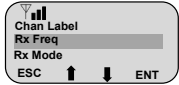


Figure 6

7. Highlight “Rx Mode” and press “ENT”, highlight “Analog” and press “ENT”. (See Figure 7)
 8. Highlight “Rx Guard” and press “ENT”. (See Figure 8)
 - Press the “CLR” softkey and enter a valid RX Tone and press “ENT”.
- Note: “RX NAC” is a Digital function and should be skipped while programming an Analog channel.*
Note: “Squelch Mode” can not be changed while programming an Analog Channel.

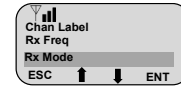


Figure 7

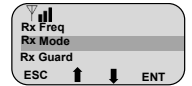


Figure 8

9. Highlight “Tx Freq” using the up/down softkeys and press “ENT”. (See Figure 9)
 - Press the “CLR” softkey and enter a valid TX Frequency and press “ENT”.

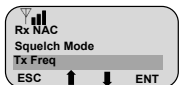


Figure 9

10. Highlight “Tx Mode” and press “ENT”, highlight “Analog” and press “ENT”. (See Figure 10)
 11. Highlight “Bandwidth” and press “ENT”, highlight “12.5 KHz” for Narrowband and press “ENT”. (See Figure 11)
 12. Highlight “Tx Guard” and press “ENT”. (See Figure 12)
 - Press the “CLR” softkey and enter a valid TX Tone and press “ENT”.
- Note: “TX NAC” is a Digital function and should be skipped while programming an Analog channel.*
“TGID” is a Digital function and should be skipped while programming an Analog channel.

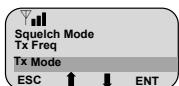


Figure 10

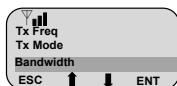


Figure 11

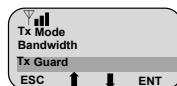


Figure 12

13. Highlight “Secure Mode” and press “ENT”, highlight “Clear” and press “ENT”. (See Figure 13)
Note: “Key” and “Key Lock” options are for Encryption only, and should be skipped while programming an Analog Channel.

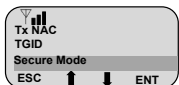


Figure 13

14. Highlight “Low Pow Lock” and press “ENT”, highlight “OFF” and press “ENT”. (See Figure 14)
Note: Selecting “ON” will enable low power at all times for that particular channel.

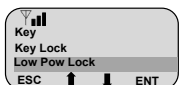


Figure 14

15. Highlight “Plist Disable” using the up/down softkey and press “ENT”, select “OFF” and press “ENT”.
16. Press “ESC” once and select another channel to program repeat steps 6 through 15, or press “ESC” several times to exit the programming mode.



KNG P150s PORTABLE RADIO CLONING INSTRUCTIONS

1. Assume that both radios are off and attach the cloning cable to both the **Source** and **Target** radios.
2. Turn both radios on.
Note: Determine which group needs to be cloned from the Source radio, and to which group on the target radio will be cloned.
3. Place the **Master** radio in Cloning Mode by pressing the “Menu” softkey, highlight “Cloning” and press “ENT”. (See Figure 1)

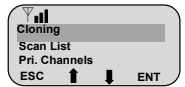


Figure 1

4. Select the **type of clone** to be preformed by the **Master** radio. (See Figure 2)
 - **Active Zone** - Information from the current selected zone in the source radio will be sent to the current active zone on the target radio.
 - **Zone-to-Zone** - User selects the source and target zones to be cloned.
 - **Entire Radio** - All information from the Source radio will be cloned.

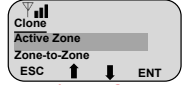


Figure 2

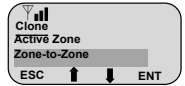


Figure 3

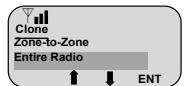


Figure 4

Note: Radios programmed with blocked zones will not receive cloning information when a Entire Radio clone is selected.

Entire radio cloning transfers all radio information except the following:

- Radio Serial Number
- P25 Identification Number
- Encryption Keys
- Passwords

4A. Active Zone: (See Figure 2)

- Highlight “Active Zone” and press “ENT”.

4B. Zone-to-Zone: (See Figure 3)

- Highlight “Zone-to-Zone” and press “ENT”.
- Scroll and select the “Source Zone” and press “ENT”.
- Scroll and select the “Destination Zone” and press “ENT”.

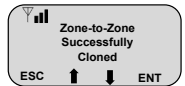


Figure 5

4C. Entire Radio: (See Figure 4)

- Highlight “Entire Radio” and press “ENT”.

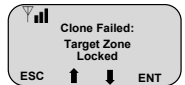


Figure 6

5. Once the cloning is successfully complete press “ESC” on the Source radio for normal operation. (See Figure 5)
Note: If cloned failed, its possible that the Target zone is blocked from accepting any incoming clone. (See Figure 6)



KNG P150s Cloning Connections



MIDLAND STP 105B/404A PORTABLE RADIO BASIC OPERATION & CONTROLS

1. Turn power **ON** by turning the **ON/OFF Volume Knob** clockwise.
 - The LCD will indicate the current channel label.
2. **Select a Zone/Group** number by pressing the appropriate the “**Zone**” softkey.
 - Enter the zone number via the key pad and press the “**OK**” softkey
 - **OR**
 - Press the “**Zone**” softkey. Press the **UP/Down** keypad keys to desired zone and press the “**OK**” softkey.
3. **Select a channel** by turning the **Channel Select Knob** to one of the 16 available positions. (*Channel 01 -16*)
4. **Adjust the volume** by pressing the “**F2 Squelch**” button once to open the squelch.
 - Set the volume to desired level, press the “**F2 Squelch**” key once more to close Squelch.
 - The radio will display “**CHANNEL MONITOR ON or OFF**”.
 - To exit, press the “**Exit**” softkey or wait 3 seconds and the radio will return to it’s default operating display.

The radio is now ready to operate on the current group and channel.

*Note: Holding down the “**F2 Squelch**” button will open the “**Squelch Adjust**” parameter of the radio. This setting allows the user to adjust the squelch settings for each individual channel. To exit, press the “**Exit**” softkey or wait 3 seconds and the radio will return to it’s default operating display. (See Radio Settings for more detail)*

6. **To transmit**, press and hold the **Push-To-Talk (PTT)** button on the side of the radio.

*Note: The Transmit Indicator Light should glow red while transmitting.
If not, the battery may be low or the channel is RX only or busy.*

7. **Pause 1 second** and talk in a normal voice into the microphone.
Note: Try to shield the microphone from wind and other loud background noises.

8. **Release the PTT** to stop transmitting and receive incoming transmissions.





MIDLAND STP 105B/404A PORTABLE RADIO SETTINGS/OPTIONS GUIDE

CHANGING GROUPS/ZONES:

To change groups - press the “Zone” softkey.

- Enter the zone number via the key pad and press the “OK” softkey. (See Figure 1)
- OR
- Press the “Zone” softkey.
- Press the UP/Down keypad keys to desired zone and press the “OK” softkey. (See Figure 2)

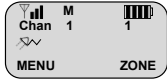


Figure 1

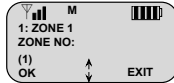


Figure 2

ENABLING/DISABLING SCAN:

To Enable Scan - Press the “ ” softkey. The display will indicate the radio is scanning by a “ ” icon in the upper right corner.

To Disable Scan - Press the “ ” softkey.

Note: Pressing the “Menu” softkey while scanning will also disable scan.

If no channels are in the scan list, the user will get the following error “Enter Scan List” on the display.

ADD/REMOVE CHANNEL FROM SCAN LIST:

To Add a Channel - Press the “Menu” softkey, scroll down to “Channel Parameter” using the up/down softkeys and press the “Select” softkey.

- Scroll to “Channel Scan” and press the “Select” softkey.
- Scroll down/up to desired channel and press the “Select” softkey.
- Scroll to “Add to List, 1st Priority or 2nd Priority” and press the “OK” softkey.
- Press the “Exit” softkey, and continue adding more channels to the scan list.
- Once complete, press “Exit” twice to close scan edit list.

To Remove a Channel - Repeat the process and select “Remove”.

Note: Holding down the “#” key will also bring up the Edit Scan List menu.

TX POWER SELECTION:

To Change Power Settings - press the “F1” side button to cycle between HI/MID/LOW power settings.

Note: H= HI Power/ M=Medium Power/ L=Low Power (See Figures 3, 4 and 5)

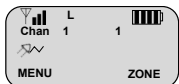


Figure 3

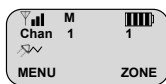


Figure 4

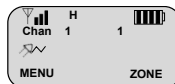


Figure 5

LOCKING KEYPAD:

To Lock Keypad - press the “ ” softkey once to lock keypad.

To Unlock Keypad - press the “ ” softkey once more then press the “Unlock” softkey to unlock keypad.

SQUELCH ADJUSTMENT:

To Adjust Squelch - Press and hold the “F2 Squelch” button to open the “Squelch Adjust” parameter. (See Figure 6)

- Adjust the squelch setting by using the up/down softkeys and press the “OK” softkey.

Note: Setting squelch to the far left, completely opens the squelch sensitivity setting (Open Squelch). (See Figure 7)



Figure 6



Figure 7



MIDLAND STP 105B/404A PORTABLE RADIO ANALOG PROGRAMMING GUIDE

Programing an Analog Channel:

1. Select the group and channel you wish to program. *(See Figure 1)*
 - To change groups - press the “Zone” softkey.
 - Enter the zone number via the key pad and press the “OK” softkey.

OR

 - Press the “Zone” softkey.
 - Press the UP/Down keypad keys to desired zone and press the “OK” softkey.
2. Select the “Menu” softkey, scroll down/up to “Channel Parameters” and press the “Select” softkey. *(See Figure 2)*
3. Scroll down/up to “Channel” and press the “Select” softkey to enter channel programming mode.
4. Enter a 5-Digit Password and press the “OK” softkey. *NIICD Password is “00000” (See Figure 3)*
5. Scroll up/down to desired channel and press the “Select” softkey to enter channel parameters. *(See Figure 4)*

Channel Parameters:

6. **Channel Mode:** Default is set to “Analog”. *(See Figure 5)*
 - To change setting, press the “Edit” softkey and scroll up/down to select “Analog, Digital, or Multi” and press the “OK” softkey.
7. **RX Frequency:** Press the “Edit” softkey to edit the RX Frequency. *(See Figure 6)*
 - Press the “ C^{C} ” key several times to clear the frequency and enter the new RX Frequency and press the “OK” softkey.
8. **TX Frequency:** Press the “Edit” softkey to edit the TX Frequency. *(See Figure 7)*
 - Press the “ C^{C} ” key several times to clear the frequency and enter the new TX Frequency and press the “OK” softkey.
9. **TX Power:** Default is set to Medium (2 Watts)
 - To change setting, press the “Edit” softkey and scroll up/down to select “Low, Medium, or High” Power and press the “OK” softkey.
10. **Channel Name:**
 - To change the channel name, press the “Edit” softkey and press the “ C^{C} ” key several time to clear the channel name.
 - Enter a new channel name via the numeric key pad and press the “OK” softkey.
11. **TX Timeout:** Default is set to “Yes”. *(Timer is set to 120 seconds)*
 - To change setting, press the “Edit” softkey and scroll up/down to select “No or Yes” and press the “OK” softkey.
12. **RX Tone Type:** Default is set to “CCS”
 - To change setting, press the “Edit” softkey and scroll up/down to select “CCS or DCS” and press the “OK” softkey.
13. **RX Tone:** Default is set to “None”.
 - To change setting, press the “Edit” softkey and scroll up/down to select desired tone from list and press the “OK” softkey.
14. **TX Tone Type:** Default is set to “CCS”.
 - To change setting, press the “Edit” softkey and scroll up/down to select “CCS or DCS” and press the “OK” softkey.
15. **TX Tone:** Default is set to “None”.
 - To change setting, press the “Edit” softkey and scroll up/down to select desired tone from list and press the “OK” softkey.
16. **Chan. Spacing:** Default is set to “12.5Khz”. Narrowband
 - To change setting, press the “Edit” softkey and scroll up/down to select either “12.5Khz or 15Khz” and press the “OK” softkey.
17. **ANI Type:** Default is set to “None”.
 - To change setting, press the “Edit” softkey and scroll up/down to select either “None, 5-Tone, or DTMF” and press the “OK” softkey.
18. **Selcall Type:** Default is set to “None”.
 - To change settings, press the “Edit” softkey and scroll up/down to select “None”, 2-Tone, or 5-Tone” and press the “OK” softkey.
19. Once all parameters are entered, press the “Exit” softkey. *(See Figure 8)*
 - Display will show “Save Changes Permanently?”.
 - Press the “Yes” softkey key to save all the entered channel parameters.

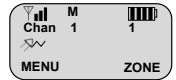


Figure 1

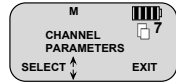


Figure 2

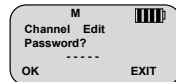


Figure 3

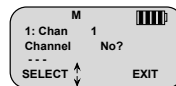


Figure 4

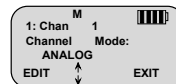


Figure 5

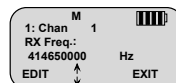


Figure 6

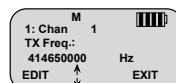


Figure 7

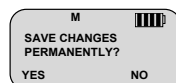


Figure 8



MIDLAND STP 105B/404A PORTABLE RADIO CLONING INSTRUCTIONS

1. Turn both radios ON.
2. Attach each end of the cloning cable to each accessories jack on top of each radio. *(See Midland Cloning Connections)*
There is no master or slave connections on the cloning cable.
Note: The Master radio will clone from it's current group into the Slaves current group.
Verify the Master and Slave radios are in the appropriate groups before cloning.
3. On the Master radio, select **"Menu"** using the left radio softkey. *(See Figure 1)*
 - Scroll down to **"Channel Parameters"** via the up/down arrow softkeys and press the **"Select"** softkey. *(See Figure 2)*
 - Scroll down to **"Cloner"** and press the **"Select"** softkey. *(See Figure 3)*
 - Select **"Single Zone"** via the up/down arrow softkeys and press the **"Select"** softkey. *(See Figure 4)*
 - Press the **"Prog"** softkey to send the clone over to the Slave radio. *(See Figure 5)*
 - The Master radio will communicate with the slave radio and write the cloned group. *(See Figure 6)*
4. Once the cloning is successful, press the **"Exit"** softkey three times to exit out of the programming/cloning mode. *(See Figure 7)*

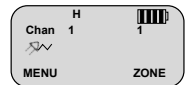


Figure 1

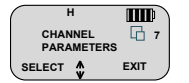


Figure 2



Figure 3

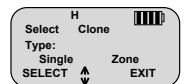


Figure 4

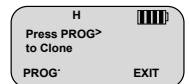


Figure 5

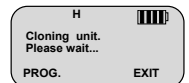


Figure 6

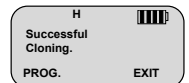


Figure 7



Midland Cloning Connections



MOTOROLA XTS2500 PORTABLE RADIO BASIC OPERATION & CONTROLS

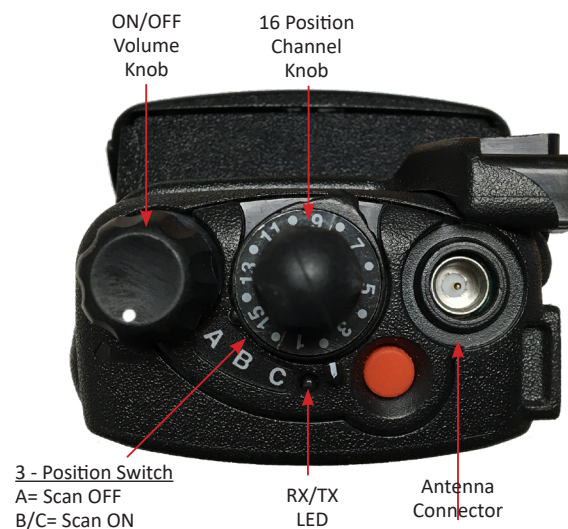
1. Turn power **ON** by turning the **ON/OFF Volume Knob** clockwise.
 - The LCD will indicate the current group and channel label.
2. Select a **zone/group number** by pressing the appropriate Menu Select soft key labeled “**ZONE**”.
 - Select a **zone** by pressing the **4-Way Navigation switch** to the right or left
 - **Or** direct enter a 2 digit group/zone number via the keypad
 - Press the “**Home**” key when finished.
3. **Select a channel** by turning the **Channel Select Knob** to one of the **16 available positions**. (*Channel 01-16*)
4. **Adjust the volume** by pressing/hold the “**Monitor**” key until it beeps and the squelch stays open.
 - Set the volume to desired level.
 - Press the “**Monitor**” key once more to close the squelch.

The radio is now ready to RECEIVE on the current group and channel.

6. **To transmit**, press and hold the Push-To-Talk (PTT) button on the side of the radio.
Note: The Transmit Indicator Light should glow red while transmitting.
If not, the battery may be low or the channel is RX only or busy.
7. **Pause 1 second** and talk in a normal voice into the microphone.
Note: Try to shield the microphone from wind and other loud background noises.
8. **Release the PTT** to stop transmitting and receive incoming transmissions.



XTS 2500 Front View



XTS 2500 Top View



XTS 2500 Side View



MOTOROLA XTS5000 PORTABLE RADIO BASIC OPERATION & CONTROLS

1. Turn power **ON** by turning the **ON/OFF Volume Knob** clockwise.
 - The LCD will indicate the current group and channel label.
2. Select a **zone/group number** by pressing the appropriate Menu Select soft key labeled **"ZONE"**.
 - Select a **zone** by pressing the **4-Way Navigation switch** to the right or left
 - **Or** direct enter a 2 digit group/zone number via the keypad
 - Press the **"Home"** key when finished.
3. **Select a channel** by turning the **Channel Select Knob** to one of the **16 available positions**. (*Channel 01-16*)
4. **Adjust the volume** by pressing/hold the **"Monitor"** key until it beeps and the squelch stays open.
 - Set the volume to desired level.
 - Press the **"Monitor"** key once more to close the squelch.

The radio is now ready to RECEIVE on the current group and channel.

6. **To transmit**, press and hold the Push-To-Talk (PTT) button on the side of the radio.

Note: The Transmit Indicator Light should glow red while transmitting.
If not, the battery may be low or the channel is RX only or busy.
7. **Pause 1 second** and talk in a normal voice into the microphone.

Note: Try to shield the microphone from wind and other loud background noises.
8. **Release the PTT** to stop transmitting and receive incoming transmissions.



XTS 5000 Front View



XTS 5000 Top View



XTS 5000 Side View



MOTOROLA XTS 2500/5000 PORTABLE RADIO SETTINGS/OPTIONS GUIDE

CHANGING ZONES/GROUPS:

To change zones/groups, press the “ZONE” softkey from the default screen/display. (See Figure 1)

- Select the desired zone by scrolling right/left with the 4-Way Navigation Switch or direct enter a 2 digit zone number via the key. (See Figure 2)
- Once a desired zone/group is selected, press the “HOME” button to make that zone/group active.



Figure 1

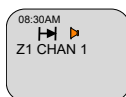



Figure 2

ENABLE/DISABLE SCAN/PRIORITY SCAN:

To Enable Scan, turn the 3-Position Rotary/Toggle Switch to the “B” or “C” position.

- LCD will indicate the radio is in scan mode, by displaying an () icon on the upper part of the LCD. (See Figure 3)

To Disable Scan, turn the 3-Position Rotary/Toggle Switch to the “A” position.

Note: If no channels are in the Scan List, the radio will beep and indicate empty scan list on the LCD when scan is enabled.



Figure 3

ADD/REMOVE CHANNELS FROM SCAN/PRIORITY LIST:

To add a channel to the Scan List, press the “PROG” softkey from the default screen/display. (See Figure 4)




- Press the “SCAN” softkey to enter into the scan list. (See Figure 5)
- Select the desired channel to scan with the top 16 Channel Select Knob.
- Press the “SEL” softkey once to enter that selected channel in the scan list. (See Figure 6)
 - LCD will indicate the channel is in the scan list, by displaying an () icon on the upper part of the LCD.
- Press the “SEL” softkey once more to enter that selected channel as the **scan priority 1 channel**.
 - LCD will indicate the radio is PRI 1 by displaying an () icon on the upper part of the LCD.
- Press the “SEL” softkey once more to enter that selected channel as the **scan priority 2 channel**.
 - LCD will indicate the radio is PRI 2 by displaying an () icon on the upper part of the LCD. (Note the flashing DOT on end)
- Press the “SEL” softkey once more to remove the channel from the scan list completely or press the “DEL” softkey to remove the channel from the scan list.
- Press the “HOME” button to return to the main screen.



Figure 4

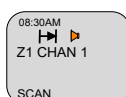


Figure 5

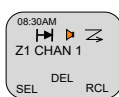


Figure 6



MOTOROLA XTS 2500/5000 PORTABLE RADIO ANALOG PROGRAMMING GUIDE

1. Turn radio ON and select a Zone/Group you wish to program.
2. Press the **4-Way Navigation** key to the right once or until the **"FPP"** softkey is visible on the display. (See figure 1)
 - Press the **"FPP"** softkey to proceed into **programming mode**.
 - Radio will indicate or ask for programming password, press the **"OK"** softkey to enter program mode. (See Figure 2)
 - Radio will display active zone, **select the desired zone** by pressing the 4-Way Navigation key left or right. (See Figure 3)
 - Once the desired zone is reached, press the **"VIEW"** softkey to change the channel programming information. (See Figure 4)
3. Select the desired channel to program, by pressing the 4-Way Navigation key left or right.
 - Once the desired channel is reached, press the **"VIEW"** softkey to change that particular channel programming information.
4. The display will indicate **"TX:xxx.xxxxxx"**, press the **"EDIT"** softkey to change the **TX frequency**. (See Figure 5)
 - Enter the valid **TX frequency** and press the **"OK"** softkey, then press the 4-Way Navigation key to the right to enter the RX frequency.
5. The display will indicate **"RX:xxx.xxxxxx"**, press the **"EDIT"** softkey to change the **RX frequency**. (See Figure 6)
 - Enter the valid **RX frequency** and press the **"OK"** softkey, then press the 4-Way Navigation key to the right to enter the TX tone.
6. The display will indicate **"TX PL: 0 CSQ"**, press the **"EDIT"** softkey to change the **TX tone**. (See Figure 7)
 - Enter a **valid TX tone** via the keypad and press the **"OK"** softkey, or
 - Press the 4-Way Navigation key up or down and select the desired tone and press the **"OK"** softkey.
 - Press the 4-Way Navigation key to the right to enter the RX tone.

Note: If an invalid tone is entered, radio will default to the closest valid tone. "0 CSQ" is default for NO TONE.
7. The display will indicate **"RX PL: 0 CSQ"**, press the **"EDIT"** softkey to change the RX tone. (See Figure 8)
 - Enter a valid RX tone via the keypad and press the **"OK"** softkey, or
 - Press the 4-Way Navigation Key up or down and select the desired tone and press the **"OK"** softkey.
 - Press the 4-way Navigation key to the right to enter the TX DPL.

Note: If an invalid tone is entered, radio will default to the closest valid tone. "0 CSQ" is default for NO TONE.
9. The display will indicate **"TX DPL: 0 CSQ"**, do not change, press the 4-Way Navigation Key to the right to enter the RX DPL.
10. The display will indicate **"RX DPL: 0 CSQ"**, do not change, press the 4-Way Navigation Key to the right to enter the TX NAC.
11. The display will indicate **"TX NAC: \$293"**, do not change, press the 4-Way Navigation Key to the right to enter the RX NAC.
12. The display will indicate **"RX NAC: \$293"**, do not change, press the 4-Way Navigation key to the right to enter the RX Type.

Note: Do not change TX/RX DPL, or TX/RX NAC for analog channels, these parameters are used for digital channels only. TX/RX DPL and TX/RX NAC will display analog equivalent information.
13. The display will indicate **"RX Type: ANALOG"**, press the **"EDIT"** softkey to change the **RX type**. (See Figure 9)
 - Toggle between **"ANALOG"**, **"MIXED"**, or **"DIGITAL"** by pressing the 4-Way Navigation Switch up or down.
 - For Analog channels, select **"ANALOG"** and press the **"OK"** softkey, then press the 4-Way Key to the right to enter TX Type.
14. The display will indicate **"TX Type: ANALOG"**. (See Figure 10)
 - Press the 4-way Navigation Key to the right to enter the Bandwidth.

Note: If the "RX Type" is set to ANALOG or DIGITAL, the TX MODE can not be changed, it will default to the RX setting.
15. The display will indicate **"Bandwidth: 12.5 Khz"**, press the **"EDIT"** softkey to change the **channel bandwidth**. (See Figure 11)
 - Toggle between either **"12.5 Khz"** for Narrowband or **"25.0 Khz"** for Wideband by pressing the 4-Way Navigation Switch up or down and press the **"OK"** key.
 - Press the 4-Way Navigation Key to the right to enter the Channel Name.

Note: UHF models are capable of selecting "20.0 Khz" for bandwidth, DO NOT SELECT THIS OPTION.
16. The display will indicate **"Chan Name: CHAN 1"**, press the **"EDIT"** softkey to change the Channel Name.
 - Enter the desired channel name using the alpha numeric keypad and press the **"OK"** softkey when done.
 - Press the 4-Way Navigation Key to the right, to enter the Zone Name.

Note: For Space Character, press the 4-Way Navigation Switch to the Right.
17. The display will indicate **"Zone Name: Z1"**, press the **"EDIT"** softkey to change the **Zone Name**.
 - Enter the desired Zone Name using the alpha numeric keypad and press the **"OK"** softkey when done.

Note: NIICD does not recommend changing the Zone Name.
18. Once the Zone Name is edited, pressing the 4-way Navigation Switch to the right will bring up the TX Frequency option.
19. Once all the programming parameters have been entered for that channel press the **"DONE"** softkey and select another channel to program or press the **"HOME"** Button to exit programming mode.



Figure 1



Figure 2

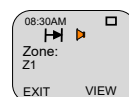


Figure 3



Figure 4

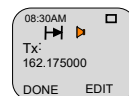


Figure 5

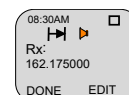


Figure 6



Figure 7



Figure 8

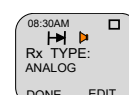


Figure 9

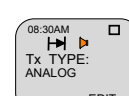


Figure 10



Figure 11



MOTOROLA XTS 2500/5000 PORTABLE RADIO CLONING INSTRUCTIONS

1. Connect the cloning cable to both the Master and Slave radios. *(See Motorola Cloning Connections)*
2. Turn both radios on.
3. On the **MASTER RADIO**, press the “CLON” softkey from the default screen to bring up the cloning menu. *(See Figure 1)*
 - The Master radio will momentarily display “TARGET RADIO CONNECTED” if a slave radio is connected correctly.
 - The Slave radio will display “CLONE MODE” on the LCD.
4. Select a desired **zone/group** by pressing the 4-Way Navigation Key to the left or right. *(See Figure 2)*
5. Once a zone is selected, press the “SEL” softkey to enable that zone to be sent over to the slave radio.
 - The display will indicate the zone is enabled by an “C” icon on the right side of the LCD. *(See Figure 3)*
6. Press the “DONE” softkey to select a target zone/group. *(See Figure 4)*
7. The display will indicate “Target: Zx:”, select a desired group/zone that the Master radio will write/clone over to the Slave radio.
 - Press the “SEL” softkey when desired target group/zone is selected.
 - The display will indicate the target zone is enabled by an “C” icon on the right side of the LCD. *(See Figure 4)*
8. Press the “OK” softkey to begin cloning.
 - Display on Master will indicate “Wait: Cloning.....”.
 - Display on Master will indicate “CLONE SUCCESSFUL” once clone is complete. *(See Figure 6)*
9. Press the “EXIT” softkey to exit clone mode and return to default screen.

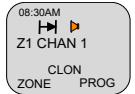


Figure 1

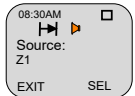


Figure 2

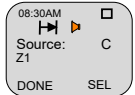


Figure 3

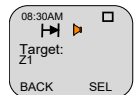


Figure 4

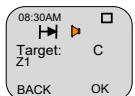


Figure 5

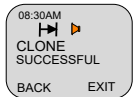


Figure 6



Motorola Cloning Connections



MOTOROLA XTS 2500 PORTABLE RADIO CLAMSHELL REMOVAL INSTRUCTIONS

1a. Squeeze Clamshell Cover Release Tabs



Figure 1

1b. Push the radio with thumb through the bottom opening of the clamshell cover

2a. Slide the Clamshell Cover down until removed from the Clamshell Magazine



Figure 2

Note: Once the Clamshell cover is removed, batteries can be easily replaced without removing the Clamshell Magazine

3a. Slide down the Clamshell Magazine Release Latches



Figure 3

4a. Pull the top end of the Clamshell Magazine slightly away from the radio



Figure 4

5a. Push the radio slightly down and out to release from the bottom portion of the Clamshell Magazine



Figure 5

6a. Pull the radio from the Clamshell Magazine and replace the batteries if needed



Figure 6