

# NATIONAL INTERAGENCY INCIDENT COMMUNICATIONS DIVISION KING DPH PORTABLE RADIO ANALOG PROGRAMMING GUIDE Page 1 of 5, Version 2012



Select a group and channel you wish to program

### 2. Access Program Mode

- O Insert a programming plug into the side connector of the radio.
- o Press and hold the red Master Switch on the programming plug.
- o Press and hold the "FCN" key for approximately three seconds until the LCD displays "----- ID". (See Figure 1)
- O Enter a valid password. NIFC 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 "CH00". (See Figure 2)
- 3. 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)

Note: The "N" indicates that the channel is set for Narrow-Band operation, No indication for Wide-Band operation.

5. Once the Bandwidth is set press the "FCN" key to scroll to the next programming parameter.

The LCD will display " 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.

6. The LCD will display " 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

7. 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 tone using the keypad and press the "ENT" key.

Note: Enter "000.0" for no tone.

8. LCD will display " 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.

9. The LCD will display " 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.

10. LCD will display "PRGTX 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.

11. LCD will Display " 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

12. LCD will display PRGTX CG 110.9" for programming TX Code Guard. (See Figure 10)

Press the "CLR" key to clear the current tone and enter a valid tone using the keypad and press the "ENT" key.

Note: Enter "000.0" for no tone.

13. LCD will display "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.

14. LCD will display the "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.

15. LCD will display the channel name/label, press the "ENT" key to keep name/label and finish programing the channel or press the "CLR" key to change the name/label for that channel. (See figure 11)

## 16. Changing Channel Label

- o Press the "CLR" key to clear the label.
- o Press the "PRI" key to scroll through available Alphanumeric Characters.
- o Press the "FCN" key to enter a character and shift to the left for the next character.
- O Repeat the process until desired name/label is entered and press the "ENT" key.

Note: LCD is an 8 Character display. NIFC Default is set to display the Numeric Characters only in the "CH 00" parameters.

17. 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.

-- -- ID Figure 1

PRG

CH 00

Figure 2

PRG

CH 01N

Figure 3

PRG RX

162.55000

Figure 4

PRG RX MODE -- A

Figure 5

PRG RX CG 0.000.0

Figure 6

PRG RX ID SQL --NRM Figure 7

PRG TX

168.05000 Figure 8

PRG TX MODE -- A Figure 9

PRG TX CG 110.9

Figure 10

CHAN 1

PRC

Figure 11



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## ADD/REMOVE CHANNELS FROM SCAN LIST

- 1. 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)
- 2. 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

1. 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 on page 4)

In order to set the Priority Channel with the keypad, Priority Mode must be either set to B, C, or D. NIFC Default is Priority Mode A, Priority Channel follows the position of the channel select switch, so the user can not change the Priority Channel via the keypad.

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.

### **ENABLE/DISABLE SCAN/PRIORITY SCAN**

Enable Scan, by toggling the Scan Toggle Switch to the up position. (Toward the back of the radio)
 LCD will indicate scan is enabled by flashing "----" in the right side of the display if alphanumeric mode in disabled.
 (See Figure 3)

O

LCD will indicate scan is enabled by flashing "SCN" in the upper part of the display if alphanumeric mode is enabled.

- 2. Disable Scan, by toggling the Scan Toggle Switch to the down position. (Toward the front of the radio)
- 3. 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)

LCD will indicate Priority Scan is enabled by flashing "SCN" in the upper part of the display if alphanumeric mode is enabled.

4. 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.

NIFC Default is set to Priority Mode A.

## CHANGING GROUPS

1. Press the "#" key followed with the 2-digit number of the desired group and press "ENT" or wait 3 seconds. (See Figure 5)

Note: All DPH NIFC model radios have a 25 group capacity.

Groups 1-4 contain the Standard NIFC Frequencies.

## TX USER SELECTABLE TONES

- 1. 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: NIFC default is TX User Selectable Tones Disabled. Tones can be enabled through the "CH 00" functions.

## **HI/LOW POWER SETTINGS**

- 1. 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)
   <u>Note:</u> NIFC Low Power setting is set to 2.0 Watts, High Power setting is set to 5.0 Watts. (Current draw dependent)

## ENABLE/DISABLE KEYPAD

- 1. To Disable keypad, press and hold the "FNC" key until the LCD displays "LOCKED". (See Figure 7)
- 2. To Enable keypad, press and hold the "FNC" key until the LCD displays "UNLOCKED". (See Figure 8)

CHAN 1









Figure 5



Figure 6



Figure 7



Figure 8



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## CLONING RADIO SETTINGS (See Figure 5)

- 1. Turn both radios ON.
- 2. Attach the Master end of the cloning cable to the side connector of the Master radio.
- Put the Master radio in programming mode by holding down the Master Switch and pressing the "FCN" key on the radio until the LCD displays (-- -- -- ID). (See Figure 1)
- 4. Enter a valid password, if requested, and press the "ENT" key. (NIFC Default Password is set to "000000") The LCD will display "CH 00" if the correct password was entered. (See Figure 2)
- 5. Attach the other end of the cloning cable to the side connector of the radio to be cloned.
- Press the "\*" key on the Master radio.
   The LCD will flash "PROG", indicating that the radio is ready to download. (See Figure 3)
- 7. 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.

If the clone was not successful, 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 stort 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.



PRG

CH 00

Figure 2



Figure 3



Figure 4

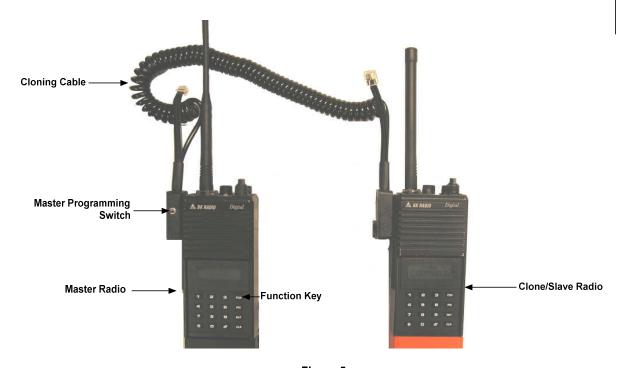


Figure 5



# NATIONAL INTERAGENCY INCIDENT COMMUNICATIONS DIVISION KING DPH PORTABLE RADIO "CH 00" SETTINGS Page 4 of 5, Version 2012



- 1. Select a group you wish to program.
- 2. Access the Program Mode to enter the "CH 00" Settings. (See Figure 1) (See Access Program Mode on page 1)
- 3. Once "CH 00" is displayed, press the "FNC" key to scroll to the fist "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: NIFC does not recommend changing the group password, Default password is set to "P000000"
- 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 "FNC" key to advance to the next field. (NIFC Default is set to "0000000")
- 5. The display will indicate "PRGTX 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. (NIFC Default is set to "120 SEC") A TOT value of 0.0 Seconds, disables the TOT.
- 6. The display will indicate " 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. (NIFC Default is set to "2.0 SEC")
- 7. The display will indicate " 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 "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 " 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 NIFC Default is "1-12345" (See Figure 8)

- 1-12345.....Battery Saver (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 Key Lockout (Enables the Lock out of the "PRI" key, so user can not change the Priority 1 Channel.)
- 1-12345.....Scan List Lockout (Enables the Scan List Lock out, so user can not add/remove channels from the scan list.)

## CH 00 Group 2 Functions NIFC Default is "2-12345" (See Figure 9)

- 2-12345.....User 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.)
- 2-1234<u>5</u>.....**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 NIFC Default is "3-12345" (See Figure 10)

- 3-<u>1</u>2345.....Reserved
- 3-1**2**345.....**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 " 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. (NIFC 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.

CH 00 Figure 1

PRG P000000 Figure 2

0000000 Figure 3

160 SEC

2.0 SEC Figure 5

PR 1 OFF

PRG PR 2 OFF

1-- 12345

2-- 12345 Figure 9

3-- 12345 Figure 10

LITE OFF
Figure 11

GROUP 01

Figure 12



# NATIONAL INTERAGENCY INCIDENT COMMUNICATIONS DIVISION KING DPH PORTABLE RADIO BASIC OPERATION & RADIO CONTROLS Page 5 of 5, Version 2012



- Turn power ON by turning the ON/OFF Volume Knob clockwise.
   A beep indicates the radio is operational. The LCD will indicate the current channel.
- 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 14 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 the it receives the correct tone.

### The radio is now ready to RECEIVE on that current 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.



Figure 2: DPH Front View

Figure 3: DPH Side View