

# KENWOOD

## NX-3000 series

### USER MANUAL



JV KENWOOD Corporation

B5A-2074-00/04

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This manual has been prepared based on basic settings. Depending on the setting, the descriptions provided may be different from the actual operations.

## **Transceiver Display Examples in This Manual**

This manual describes using mainly the Portable transceiver display as examples if the functions are common to both Portable and Mobile transceivers. The Mobile transceiver display are used as and when needed.

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# BASIC OPERATIONS

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## SWITCHING POWER ON/ OFF

### Portable

Turn the **Power** switch/ **Volume** control clockwise to switch the transceiver power ON.

- The following screen appears if the Custom Start-up Screen has not been set.

Turn the **Power** switch/ **Volume** control counterclockwise to switch the transceiver power OFF.

### Mobile

Press [ $\text{⏻}$ ] to switch the transceiver ON.

- The following screen appears if the Custom Start-up Screen has not been set.

Press [ $\text{⏻}$ ] again to switch the transceiver OFF.



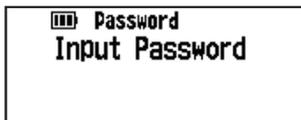
## ■ Transceiver Password

If the transceiver is password protected, “**Input Password**” will appear on the display when the power is turned on. To unlock the transceiver, enter the correct password.

- 1 Press the button programmed as [**Transceiver Password**] to enter Transceiver Password Mode.

Alternatively, press the button programmed as [**Menu**] to enter Transceiver Password Mode using the Menu Mode.

- If a password has been registered and the [**Transceiver Password**] function has not been programmed to a button or configured to the menu, the transceiver enters Transceiver Password Mode when the power is turned on.



- 2 Enter a number using the [ $\blacktriangle$ ] and [ $\blacktriangledown$ ] buttons.

- On full button model Portable transceivers or Mobile transceivers with microphone with keypad, you can enter the password directly by pressing the keypad.



- 3 Press the [ $\text{⏻}$ ] or [ $\text{[*]}$ ] button to accept the number.

- 4 Repeat steps 2 and 3 to enter the entire password.
  - Press the [↵] or [#] button to delete an incorrectly entered number. Press and hold the [↵] or [#] button to delete all numbers.
- 5 Press the [□] or [\*] button to confirm the entry.
  - If you enter an incorrect password, an error tone sounds and the transceiver remains locked.
  - The password can contain a maximum of 6 digits.

## ADJUSTING THE VOLUME

### Portable

Rotate the **Power** switch/ **Volume** control to adjust the volume.

Rotate clockwise to increase the volume and counterclockwise to decrease the volume.

### Mobile

Press the button programmed as [**Volume Up**] to increase the volume. Press the button programmed as [**Volume Down**] to decrease the volume.



## SELECTING A ZONE AND CHANNEL

- 1 Select the desired zone using the buttons programmed as [**Zone Up**]/ [**Zone Down**]. Each zone contains a group of channels.



- 2 Select the desired channel using the buttons programmed as [**Channel Up**]/ [**Channel Down**]. Each channel is programmed with settings for transmitting and receiving.
  - The transceiver may have names programmed for zones and channels. The zone name and channel name can contain up to 12 and 14 characters respectively for Portable transceivers, and up to 14 characters each for Mobile transceivers.

## TRANSMITTING

- 1 Select the desired zone and channel using the buttons programmed as [Zone Up]/ [Zone Down] and [Channel Up]/ [Channel Down].

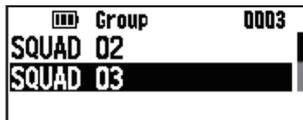


- 2 Press the **PTT** switch and speak into the microphone. Release the **PTT** switch to receive.
  - The LED indicator lights red while transmitting and green while receiving a signal. This indicator can also be disabled by your dealer.
  - For best sound quality at the receiving station, hold the microphone approximately 1.5 inches (3 cm to 4 cm) from your mouth.

### ■ Making Group Calls (NXDN Conventional/ DMR Conventional)

You can select a group ID from the list to make a call to those parties on a Conventional channel.

- 1 Press the button programmed as [Group], [Group + Short Message] or [Group + Status] to enter Group Call Mode.  
Alternatively, press the button programmed as [Menu] to enter Group Call Mode using the Menu Mode.
  - The group ID list appears on the display.
- 2 Press the [▲] and [▼] buttons to select a Group ID/ name from the list that has been pre-entered into your transceiver.



- 3 Press and hold the **PTT** switch to make the call.
  - The “♪” icon blinks. “Group” and the Group name of the target transceiver are displayed.

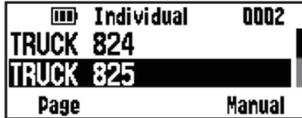


- Speak into the transceiver as you would during a normal call.

## ■ Making Individual Calls (NXDN Conventional/ DMR Conventional)

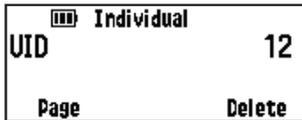
You can make calls to specific persons.

- 1 Press the button programmed as **[Individual]**, **[Individual + Short Message]** or **[Individual + Status]** to enter Individual Call Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Individual Call Mode using the Menu Mode.
  - The ID list appears on the display.
- 2 Press the **[▲]** and **[▼]** buttons to select a unit ID from the list that has been pre-entered into your transceiver.



Alternatively, on full button model Portable transceivers or Mobile transceivers with microphone with keypad, you can enter a unit ID directly by pressing the keypad.

- Press the **[↵]** button to enter the manual input mode.  
To delete the ID entered, press the **[↵]** button to delete one digit, or press and hold the **[↵]** button to delete all digits.



- 3 Press and hold the **PTT** switch to make the call.
  - The “🎤” icon blinks. “Individual” and the ID name of the target transceiver are displayed.



- Speak into the transceiver as you would during a normal call.

## ■ Making Group Calls (NXDN Trunking/ DMR Trunking)

You can select a channel with the Group ID you wanted to call to make a call to those parties on a Trunking channel.

- If the traffic channel is busy, a busy message appears and the busy tone sounds. Release the **PTT** switch and wait for the channel to become free. When the traffic channel becomes free, a proceed tone sounds.
- 1 Select the configured Group channel using the buttons programmed as **[Channel Up]/ [Channel Down]**.

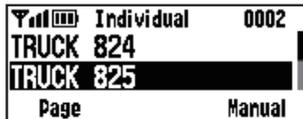


- 2 Press and hold the **PTT** switch to make the call.
  - “**Calling**” appears on the display while the call is being made, and disappears once the call is established.
  - Speak into the transceiver as you would during a normal call.

## ■ Making Individual Calls (NXDN Trunking/ DMR Trunking)

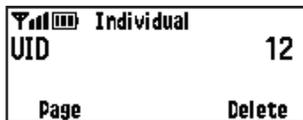
You can make calls to specific persons on a Trunking channel.

- 1 Press the button programmed as **[Individual]**, **[Individual + Short Message]** or **[Individual + Status]** to enter Individual Call Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Individual Call Mode using the Menu Mode.
  - The ID list appears on the display.
- 2 Press the **[▲]** and **[▼]** buttons to select a unit ID from the list that has been pre-entered into your transceiver.



Alternatively, on full button model Portable transceivers or Mobile transceivers with microphone with keypad, you can enter a unit ID directly by pressing the keypad.

- Press the **[↵]** button to enter the manual input mode.  
To delete the ID entered, press the **[↵]** button to delete one digit, or press and hold the **[↵]** button to delete all digits.



- 3 Press and hold the **PTT** switch to make the call.
  - “**Calling**” appears on the display while the call is being made, and disappears once the call is established.
  - Speak into the transceiver as you would during a normal call.

## RECEIVING

- 1 Select the desired zone and channel using the **Selector** (Portable transceivers only) and the buttons programmed as **[Zone Up]/ [Zone Down]** or **[Channel Up]/ [Channel Down]**. (If the Scan function has been programmed, you can switch it on or off as desired.)
- 2 When you hear the caller's voice, readjust the volume as necessary.
  - If signaling has been programmed on the selected channel, you will hear a call only if the signal tone matches the tone set up on your transceiver.

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### Note:

- Signaling allows your transceiver to code your calls. This will prevent you from listening to unwanted calls. It does not make calls private, it only prevents them from being heard by transceivers set with a different signaling code. Refer to "SIGNALING" {p. 42} for details.
  - A ringing tone will sound when receiving a call if the alert tone has been enabled in the Alert Tone setting. For details, consult your dealer.
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### ■ Receiving Group Calls (NXDN)

When you receive a group call on a Conventional channel and the received group ID matches the ID set up on your transceiver, you can hear the caller's voice.

When on a Trunking channel, if the Group ID of a received call matches your Group ID, you will hear the call.

### ■ Receiving Individual Calls (NXDN)

When you receive an individual call on a Conventional channel, a ringing tone will sound and the display will show the caller's ID. To respond to the call, press and hold the **PTT** switch and speak into the transceiver as you would during a normal call.

When you receive an individual call on a Trunking channel, a ringing tone will sound and the caller's ID appears on the display. After receiving the call, you can respond to the call by pressing and holding the **PTT** switch and speaking into the transceiver as you would during a normal call.

### ■ Receiving Group Calls (DMR)

When you receive a group call on a Conventional channel and the received group ID matches the ID set up on your transceiver, you can hear the caller's voice.

When on a Trunking channel, if the Group ID of a received call matches your Group ID, you will hear the call.

### ■ Receiving Individual Calls (DMR)

When you receive an individual call on a Conventional channel, a ringing tone will sound and the display will show the caller's ID. To respond to the call, press and hold the **PTT** switch and speak into the transceiver as you would during a normal call.

When you receive an individual call on a Trunking channel, a ringing tone will sound and the caller's ID appears on the display. After receiving the call, you can respond to the call by pressing and holding the **PTT** switch and speaking into the transceiver as you would during a normal call.

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# PROGRAMMABLE FUNCTIONS

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Refer to the tables in this section to determine which functions are available for appropriate channels. Function descriptions start on page 21. Please contact your dealer for further details on these functions.

## MENU MODE

Many functions on this transceiver are selected or configured through the Menu instead of physical controls. Once you become familiar with the Menu system, you will appreciate the versatility it offers.

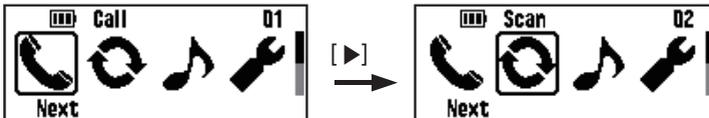
Some transceiver buttons may already be programmed with functions listed in the Menu. Those functions can be accessed directly by pressing the button. All other functions can still be accessed using the transceiver Menu. Refer to “FUNCTION LIST” {p. 10} for the available Menu items.

### ■ MENU ACCESS

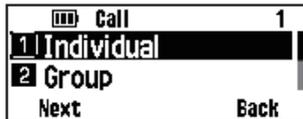
- 1 Press the button programmed as **[Menu]**.
  - The category list is shown.
  - When there is only one category, the function list is shown (proceed to step 4).



- 2 Press **[▲]/[▼]/[◀]/[▶]** to select a category item.
  - On full button model Portable transceivers or Mobile transceivers with microphone with keypad, you can enter a category number directly.



- 3 Press the **[□]** or **[\*]** button to view the function list.



- 4 Press **[▲]/[▼]** to select a function item.
  - On full button model Portable transceivers or Mobile transceivers with microphone with keypad, you can enter a function number directly.

- 5 Press the [□] or [\*] button to set up the selected function item.
  - Press and hold the [⬆] button to return to the category list. Alternatively, press the [➡] or [#] button.
- 6 Press [▲]/[▼] to select your desired setting.
  - For settings with more than one level, repeat steps 5 and 6.
- 7 Press the [□] or [\*] button to set the selected setting and exit Menu mode.
  - Press and hold the [⬆] button at any time to return to the previous display. Alternatively, press the [➡] or [#] button.
  - Press the [⬆] button at any time to exit Menu mode.

## FUNCTION MODE

Your transceiver operations vary according to the functions that your dealer has programmed onto the transceiver buttons. Refer to “FUNCTION LIST” for the available programmable functions.

## FUNCTION LIST

PF Button: Functions that can be programmed to the transceiver buttons

Menu: Functions that can be accessed using the transceiver Menu

Analog Conv.: Channels set up for Analog Conventional Operation

NXDN Conv.: Channels set up for NXDN Conventional Operation

DMR Conv.: Channels set up for DMR Conventional Operation

LTR Trunking: Channels set up for LTR Trunking Operation

NXDN Trunking: Channels set up for NXDN Trunking Operation

DMR Trunking: Channels set up for DMR Trunking Operation

✓: Available

N/A: Not Available

### ■ Conventional Operation

Function	Menu Display	PF Button	Menu	Analog Conv.	NXDN Conv.	DMR Conv.
None	-	✓	N/A	✓	✓	✓
2-tone	2-tone	✓	✓	✓	✓	N/A
Activity Detection *1	Activity Det	✓	✓	✓	✓	✓
Activity Reset *1	-	✓	N/A	✓	✓	✓
ANR Preset	ANR Preset	N/A	✓	✓	✓	✓
Audio Profile	Audio Profile	N/A	✓	✓	✓	✓
Auto Telephone	Auto Telephone	✓	✓	N/A	N/A	N/A
Autodial	Auto Dial	✓	✓	✓	✓	N/A
Autodial Programming	Auto Dial Prog	✓	✓	✓	✓	✓
AUX *1	AUX	✓	✓	✓	✓	✓
AUX A *2	AUX A	✓	✓	✓	✓	✓
AUX B *2	AUX B	✓	✓	✓	✓	✓
AUX C *2	AUX C	✓	✓	✓	✓	✓

Function	Menu Display	PF Button	Menu	Analog Conv.	NXDN Conv.	DMR Conv.
AUX Output ID 1 *2	-	✓	N/A	✓	✓	✓
AUX Output ID 2 *2	-	✓	N/A	✓	✓	✓
AUX Output ID 3 *2	-	✓	N/A	✓	✓	✓
Backlight *1	-	✓	N/A	✓	✓	✓
Battery Status *1	Battery Status	✓	✓	✓	✓	✓
Bluetooth	Bluetooth	✓	✓	✓	✓	✓
Bluetooth Connect/ Disconnect	-	✓	N/A	✓	✓	✓
Bluetooth Device	BT Device	N/A	✓	✓	✓	✓
Bluetooth Discoverable	Discoverable	N/A	✓	✓	✓	✓
Bluetooth Headset Connection Type	BT Headset Typ	N/A	✓	✓	✓	✓
Bluetooth Information	Bluetooth Info	N/A	✓	✓	✓	✓
Bluetooth Speaker	BT Speaker	✓	✓	✓	✓	✓
Broadcast	Broadcast	✓	✓	N/A	N/A	✓
Button Lock	-	✓	N/A	✓	✓	✓
Call 1 ~ 6	-	✓	N/A	✓	✓	✓
Call Interruption	-	✓	N/A	N/A	N/A	✓
Call Response	-	✓	N/A	✓	✓	N/A
Channel Down	-	✓	N/A	✓	✓	✓
Channel Entry	-	✓	N/A	✓	✓	✓
Channel Information	-	✓	N/A	✓	✓	N/A
Channel Recall	-	✓	N/A	✓	✓	✓
Channel Up	-	✓	N/A	✓	✓	✓
Clear	-	✓	N/A	✓	✓	✓
Clock	Clock	✓	✓	✓	✓	✓
Clock Adjustment	Clock Adjust	✓	✓	✓	✓	✓
CW Message	-	✓	N/A	N/A	✓	N/A
Dialing	Dialing	✓	✓	N/A	N/A	N/A
Digit 10x Down *3	-	✓	N/A	✓	N/A	N/A
Digit 10x Up *3	-	✓	N/A	✓	N/A	N/A
Digit 1x Down *3	-	✓	N/A	✓	N/A	N/A
Digit 1x Up *3	-	✓	N/A	✓	N/A	N/A
Direct Channel 1 ~ 5	-	✓	N/A	✓	✓	✓
Direct Channel 1 ~ 5 Select	Direct Ch 1 Sel ~ Direct Ch 5 Sel	✓	✓	✓	✓	✓
Display Format	Display Format	✓	✓	✓	✓	✓

Function	Menu Display	PF Button	Menu	Analog Conv.	NXDN Conv.	DMR Conv.
Display Type *1	Display Type	N/A	✓	✓	✓	✓
Emergency *4	-	✓	N/A	✓	✓	✓
External Mic Sense	Ext Mic Sense	N/A	✓	✓	✓	✓
External Speaker	External SP	✓	✓	✓	✓	✓
Fixed Volume	Fixed Volume	✓	✓	✓	✓	✓
Front Panel Programming	Panel Program	✓	✓	✓	✓	✓
Function	-	✓	N/A	✓	✓	✓
GPS	GPS	✓	✓	✓	✓	✓
GPS/ Bluetooth Reset	GPS/BT Reset	N/A	✓	✓	✓	✓
GPS Position Display	GPS Pos Disp	✓	✓	✓	✓	✓
Group *6	Group	✓	✓	✓	✓	✓
Group + Short Message *6	Group+SDM	✓	✓	✓	✓	✓
Group + Status *6	Group+Status	✓	✓	✓	✓	✓
Group ID/ Channel Entry	-	✓	N/A	✓	✓	✓
High Transmit Power	High TX Power	✓	✓	✓	✓	✓
Home Channel	-	✓	N/A	✓	✓	✓
Home Channel Select	Home Ch Sel	✓	✓	✓	✓	✓
Horn Alert *2	Horn Alert	✓	✓	✓	✓	✓
Individual *6	Individual	✓	✓	✓	✓	✓
Individual + Short Message *6	Indiv+SDM	✓	✓	✓	✓	✓
Individual + Status *6	Indiv+Status	✓	✓	✓	✓	✓
Key Delete	Key Delete	✓	✓	✓	✓	✓
Language	Language	N/A	✓	✓	✓	✓
LCD Brightness *2	LCD Brightness	✓	✓	✓	✓	✓
Lone Worker	Lone Worker	✓	✓	✓	✓	✓
Low Transmit Power	Low TX Power	✓	✓	✓	✓	✓
Maintenance	Maintenance	✓	✓	✓	✓	✓
Manual Site Hunt	Manual Hunt	✓	✓	N/A	N/A	✓
Medium Transmit Power	Med TX Power	N/A	✓	✓	✓	✓
Menu	-	✓	N/A	✓	✓	✓
Mic Sense	Mic Sense	N/A	✓	✓	✓	✓
Microphone Type	Mic Type	N/A	✓	✓	✓	✓
Monitor	Monitor	✓	✓	✓	✓	✓
Monitor Momentary	-	✓	N/A	✓	✓	✓

Function	Menu Display	PF Button	Menu	Analog Conv.	NXDN Conv.	DMR Conv.
Operator Selectable Tone	OST	✓	✓	✓	N/A	N/A
OST Down	-	✓	N/A	✓	N/A	N/A
OST List	OST List	✓	✓	✓	N/A	N/A
OST Up	-	✓	N/A	✓	N/A	N/A
OVCN	OVCN	✓	✓	N/A	N/A	✓
Playback	Playback	✓	✓	✓	✓	✓
Playback (Last Recording)	-	✓	N/A	✓	✓	✓
Priority-channel Select	Pri Ch Select	✓	✓	✓	✓	✓
Public Address *2	Public Address	✓	✓	✓	✓	✓
Redial	Redial	✓	✓	N/A	N/A	N/A
Radio Check	Radio Check	N/A	✓	✓	N/A	N/A
Radio Inhibit	Inhibit	N/A	✓	✓	N/A	N/A
Radio Uninhibit	Uninhibit	N/A	✓	✓	N/A	N/A
Receive Entry *3	Receive Entry	✓	✓	✓	N/A	N/A
Remote Control	Remote Control	✓	✓	N/A	✓	✓
RX Audio Equalizer (High)	RX EQ High	N/A	✓	✓	✓	✓
RX Audio Equalizer (High Midrange)	RX EQ High Mid	N/A	✓	✓	✓	✓
RX Audio Equalizer (Midrange)	RX EQ Midrange	N/A	✓	✓	✓	✓
RX Audio Equalizer (Low Midrange)	RX EQ Low Mid	N/A	✓	✓	✓	✓
RX Audio Equalizer (Low)	RX EQ Low	N/A	✓	✓	✓	✓
RX Auto Gain Control	RX AGC	N/A	✓	✓	✓	✓
Save Log Data	Save Log Data	✓	✓	✓	✓	✓
Scan	Scan	✓	✓	✓	✓	✓
Scan Delete/ Add	Scan Del/Add	✓	✓	✓	✓	✓
Scan Normal	Scan Normal	✓	✓	✓	✓	✓
Scan Program	Scan Program	✓	✓	✓	✓	✓
Scrambler/ Encryption	Scram/Encryp	✓	✓	✓	✓	✓
Scrambler/ Encryption Code	Scram/Enc Code	✓	✓	✓	✓	✓
Send the GPS Data	Send GPS Data	✓	✓	✓	✓	✓
Short Message	Short Message	✓	✓	✓	✓	✓
Site Down	-	✓	N/A	N/A	N/A	N/A
Site Lock	Site Lock	✓	✓	N/A	N/A	N/A
Site Number	Site No.	N/A	✓	N/A	N/A	N/A
Site Select *5	Site	✓	✓	N/A	N/A	N/A
Site Up	-	✓	N/A	N/A	N/A	N/A

Function	Menu Display	PF Button	Menu	Analog Conv.	NXDN Conv.	DMR Conv.
Speaker Attenuation	-	✓	N/A	✓	✓	✓
Speaker Type	Speaker Type	N/A	✓	✓	✓	✓
Squelch Level	Squelch Level	✓	✓	✓	N/A	N/A
Squelch Off	Squelch Off	✓	✓	✓	✓	✓
Squelch Off Momentary	-	✓	N/A	✓	✓	✓
Stack	Stack	✓	✓	✓	✓	✓
Status	Status	✓	✓	✓	✓	✓
Surveillance	Surveillance	✓	✓	✓	✓	✓
System Down	-	✓	N/A	N/A	N/A	N/A
System Lock	System Lock	✓	✓	N/A	N/A	N/A
System Search	System Search	✓	✓	N/A	N/A	N/A
System Select *5	System	✓	✓	N/A	N/A	N/A
System Up	-	✓	N/A	N/A	N/A	N/A
Tactical Zone	-	✓	N/A	✓	N/A	N/A
Talk Around	Talk Around	✓	✓	✓	✓	✓
Task Request Confirmation	Task	✓	✓	N/A	✓	✓
Telephone Disconnect	-	✓	N/A	N/A	N/A	N/A
Transceiver Password	Password	✓	✓	✓	✓	✓
Transfer *2*3	Transfer	✓	✓	✓	N/A	N/A
TX Audio Equalizer (High)	TX EQ High	N/A	✓	✓	✓	✓
TX Audio Equalizer (High Midrange)	TX EQ High Mid	N/A	✓	✓	✓	✓
TX Audio Equalizer (Midrange)	TX EQ Midrange	N/A	✓	✓	✓	✓
TX Audio Equalizer (Low Midrange)	TX EQ Low Mid	N/A	✓	✓	✓	✓
TX Audio Equalizer (Low)	TX EQ Low	N/A	✓	✓	✓	✓
TX Auto Gain Control	TX AGC	N/A	✓	✓	✓	✓
Vibrator *1	Vibrator	✓	✓	✓	✓	✓
Volume Down *2	-	✓	N/A	✓	✓	✓
Volume Up *2	-	✓	N/A	✓	✓	✓
VOX	VOX Level	✓	✓	✓	✓	✓
VOX Function	VOX	✓	✓	✓	✓	✓
Zeroize	Zeroize	✓	✓	✓	✓	✓
Zone Delete/ Add	Zone Del/ Add	✓	✓	✓	✓	✓
Zone Down	-	✓	N/A	✓	✓	✓
Zone Up	-	✓	N/A	✓	✓	✓

## ■ Trunking Operation

Function	Menu Display	PF Button	Menu	LTR Trunking	NXDN Trunking	DMR Trunking
None	-	✓	N/A	✓	✓	✓
2-tone	2-tone	✓	✓	N/A	✓	N/A
Activity Detection <sup>*1</sup>	Activity Det	✓	✓	✓	✓	✓
Activity Reset <sup>*1</sup>	-	✓	N/A	✓	✓	✓
ANR Preset	ANR Preset	N/A	✓	✓	✓	✓
Audio Profile	Audio Profile	N/A	✓	✓	✓	✓
Auto Telephone	Auto Telephone	✓	✓	✓	N/A	N/A
Autodial	Auto Dial	✓	✓	✓	✓	✓
Autodial Programming	Auto Dial Prog	✓	✓	✓	✓	✓
AUX <sup>*1</sup>	AUX	✓	✓	✓	✓	✓
AUX A <sup>*2</sup>	AUX A	✓	✓	✓	✓	✓
AUX B <sup>*2</sup>	AUX B	✓	✓	✓	✓	✓
AUX C <sup>*2</sup>	AUX C	✓	✓	✓	✓	✓
AUX Output ID 1 <sup>*2</sup>	-	✓	N/A	✓	✓	✓
AUX Output ID 2 <sup>*2</sup>	-	✓	N/A	✓	✓	✓
AUX Output ID 3 <sup>*2</sup>	-	✓	N/A	✓	✓	✓
Backlight <sup>*1</sup>	-	✓	N/A	✓	✓	✓
Battery Status <sup>*1</sup>	Battery Status	✓	✓	✓	✓	✓
Bluetooth	Bluetooth	✓	✓	✓	✓	✓
Bluetooth Connect/ Disconnect	-	✓	N/A	✓	✓	✓
Bluetooth Device	BT Device	N/A	✓	✓	✓	✓
Bluetooth Discoverable	Discoverable	N/A	✓	✓	✓	✓
Bluetooth Headset Connection Type	BT Headset Typ	N/A	✓	✓	✓	✓
Bluetooth Information	Bluetooth Info	N/A	✓	✓	✓	✓
Bluetooth Speaker	BT Speaker	✓	✓	✓	✓	✓
Broadcast	Broadcast	✓	✓	N/A	✓	✓
Button Lock	-	✓	N/A	✓	✓	✓
Call 1 ~ 6	-	✓	N/A	✓	✓	✓
Call Interruption	-	✓	N/A	N/A	N/A	N/A
Call Response	-	✓	N/A	N/A	✓	✓
Channel Down	-	✓	N/A	✓	✓	✓
Channel Entry	-	✓	N/A	✓	✓	✓

Function	Menu Display	PF Button	Menu	LTR Trunking	NXDN Trunking	DMR Trunking
Channel Information	-	✓	N/A	N/A	N/A	N/A
Channel Recall	-	✓	N/A	✓	✓	✓
Channel Up	-	✓	N/A	✓	✓	✓
Clear	-	✓	N/A	✓	✓	✓
Clock	Clock	✓	✓	✓	✓	✓
Clock Adjustment	Clock Adjust	✓	✓	✓	✓	✓
CW Message	-	✓	N/A	N/A	N/A	N/A
Dialing	Dialing	✓	✓	N/A	N/A	✓
Digit 10x Down *3	-	✓	N/A	N/A	N/A	N/A
Digit 10x Up *3	-	✓	N/A	N/A	N/A	N/A
Digit 1x Down *3	-	✓	N/A	N/A	N/A	N/A
Digit 1x Up *3	-	✓	N/A	N/A	N/A	N/A
Direct Channel 1 ~ 5	-	✓	N/A	✓	✓	✓
Direct Channel 1 ~ 5 Select	Direct Ch 1 Sel ~ Direct Ch 5 Sel	✓	✓	✓	✓	✓
Display Format	Display Format	✓	✓	✓	✓	✓
Display Type *1	Display Type	N/A	✓	✓	✓	✓
Emergency *4	-	✓	N/A	✓	✓	✓
External Mic Sense	Ext Mic Sense	N/A	✓	✓	✓	✓
External Speaker	External SP	✓	✓	✓	✓	✓
Fixed Volume	Fixed Volume	✓	✓	✓	✓	✓
Front Panel Programming	Panel Program	✓	✓	N/A	N/A	N/A
Function	-	✓	N/A	✓	✓	✓
GPS	GPS	✓	✓	✓	✓	✓
GPS/ Bluetooth Reset	GPS/BT Reset	N/A	✓	✓	✓	✓
GPS Position Display	GPS Pos Disp	✓	✓	✓	✓	✓
Group *6	Group	✓	✓	✓	✓	✓
Group + Short Message *6	Group+SDM	✓	✓	✓	✓	N/A
Group + Status *6	Group+Status	✓	✓	✓	✓	N/A
Group ID/ Channel Entry	-	✓	N/A	✓	✓	✓
High Transmit Power	High TX Power	✓	✓	✓	✓	✓
Home Channel	-	✓	N/A	✓	✓	✓
Home Channel Select	Home Ch Sel	✓	✓	✓	✓	✓
Horn Alert *2	Horn Alert	✓	✓	✓	✓	✓

Function	Menu Display	PF Button	Menu	LTR Trunking	NXDN Trunking	DMR Trunking
Individual *6	Individual	✓	✓	✓	✓	✓
Individual + Short Message *6	Indiv+SDM	✓	✓	✓	✓	✓
Individual + Status *6	Indiv+Status	✓	✓	✓	✓	✓
Key Delete	Key Delete	✓	✓	✓	✓	✓
Language	Language	N/A	✓	✓	✓	✓
LCD Brightness *2	LCD Brightness	✓	✓	✓	✓	✓
Lone Worker	Lone Worker	✓	✓	✓	✓	✓
Low Transmit Power	Low TX Power	✓	✓	✓	✓	✓
Maintenance	Maintenance	✓	✓	✓	✓	✓
Manual Site Hunt	Manual Hunt	✓	✓	N/A	N/A	N/A
Medium Transmit Power	Med TX Power	N/A	✓	✓	✓	✓
Menu	-	✓	N/A	✓	✓	✓
Mic Sense	Mic Sense	N/A	✓	✓	✓	✓
Microphone Type	Mic Type	N/A	✓	✓	✓	✓
Monitor	Monitor	✓	✓	✓	✓	✓
Monitor Momentary	-	✓	N/A	✓	✓	✓
Operator Selectable Tone	OST	✓	✓	N/A	N/A	N/A
OST Down	-	✓	N/A	N/A	N/A	N/A
OST List	OST List	✓	✓	N/A	N/A	N/A
OST Up	-	✓	N/A	N/A	N/A	N/A
OVCN	OVCN	✓	✓	N/A	N/A	N/A
Playback	Playback	✓	✓	✓	✓	✓
Playback (Last Recording)	-	✓	N/A	✓	✓	✓
Priority-channel Select	Pri Ch Select	✓	✓	✓	N/A	N/A
Public Address *2	Public Address	✓	✓	✓	✓	✓
Redial	Redial	✓	✓	N/A	N/A	✓
Radio Check	Radio Check	N/A	✓	✓	N/A	✓
Radio Inhibit	Inhibit	N/A	✓	✓	N/A	N/A
Radio Uninhibit	Uninhibit	N/A	✓	✓	N/A	N/A
Receive Entry *3	Receive Entry	✓	✓	N/A	N/A	N/A
Remote Control	Remote Control	✓	✓	N/A	✓	✓
RX Audio Equalizer (High)	RX EQ High	N/A	✓	✓	✓	✓
RX Audio Equalizer (High Midrange)	RX EQ High Mid	N/A	✓	✓	✓	✓
RX Audio Equalizer (Midrange)	RX EQ Midrange	N/A	✓	✓	✓	✓

Function	Menu Display	PF Button	Menu	LTR Trunking	NXDN Trunking	DMR Trunking
RX Audio Equalizer (Low Midrange)	RX EQ Low Mid	N/A	✓	✓	✓	✓
RX Audio Equalizer (Low)	RX EQ Low	N/A	✓	✓	✓	✓
RX Auto Gain Control	RX AGC	N/A	✓	✓	✓	✓
Save Log Data	Save Log Data	✓	✓	✓	✓	✓
Scan	Scan	✓	✓	✓	✓	✓
Scan Delete/ Add	Scan Del/Add	✓	✓	✓	✓	✓
Scan Normal	Scan Normal	✓	✓	✓	✓	✓
Scan Program	Scan Program	✓	✓	✓	✓	N/A
Scrambler/ Encryption	Scram/Encryp	✓	✓	✓	✓	✓
Scrambler/ Encryption Code	Scram/Enc Code	✓	✓	✓	✓	✓
Send the GPS Data	Send GPS Data	✓	✓	✓	✓	✓
Short Message	Short Message	✓	✓	✓	✓	✓
Site Down	-	✓	N/A	N/A	✓	N/A
Site Lock	Site Lock	✓	✓	N/A	✓	✓
Site Number	Site No.	N/A	✓	N/A	✓	N/A
Site Select *5	Site	✓	✓	N/A	✓	N/A
Site Up	-	✓	N/A	N/A	✓	N/A
Speaker Attenuation	-	✓	N/A	✓	✓	✓
Speaker Type	Speaker Type	N/A	✓	✓	✓	✓
Squelch Level	Squelch Level	✓	✓	N/A	N/A	N/A
Squelch Off	Squelch Off	✓	✓	✓	✓	✓
Squelch Off Momentary	-	✓	N/A	✓	✓	✓
Stack	Stack	✓	✓	✓	✓	✓
Status	Status	✓	✓	✓	✓	✓
Surveillance	Surveillance	✓	✓	✓	✓	✓
System Down	-	✓	N/A	N/A	✓	N/A
System Lock	System Lock	✓	✓	N/A	✓	N/A
System Search	System Search	✓	✓	N/A	✓	N/A
System Select *5	System	✓	✓	N/A	✓	N/A
System Up	-	✓	N/A	N/A	✓	N/A
Tactical Zone	-	✓	N/A	N/A	N/A	N/A
Talk Around	Talk Around	✓	✓	✓	N/A	N/A
Task Request Confirmation	Task	✓	✓	N/A	✓	✓

Function	Menu Display	PF Button	Menu	LTR Trunking	NXDN Trunking	DMR Trunking
Telephone Disconnect	-	✓	N/A	✓	N/A	N/A
Transceiver Password	Password	✓	✓	✓	✓	✓
Transfer *2*3	Transfer	✓	✓	N/A	N/A	N/A
TX Audio Equalizer (High)	TX EQ High	N/A	✓	✓	✓	✓
TX Audio Equalizer (High Midrange)	TX EQ High Mid	N/A	✓	✓	✓	✓
TX Audio Equalizer (Midrange)	TX EQ Midrange	N/A	✓	✓	✓	✓
TX Audio Equalizer (Low Midrange)	TX EQ Low Mid	N/A	✓	✓	✓	✓
TX Audio Equalizer (Low)	TX EQ Low	N/A	✓	✓	✓	✓
TX Auto Gain Control	TX AGC	N/A	✓	✓	✓	✓
Vibrator *1	Vibrator	✓	✓	✓	✓	✓
Volume Down *2	-	✓	N/A	✓	✓	✓
Volume Up *2	-	✓	N/A	✓	✓	✓
VOX	VOX Level	✓	✓	✓	✓	N/A
VOX Function	VOX	✓	✓	✓	✓	N/A
Zeroize	Zeroize	✓	✓	✓	✓	✓
Zone Delete/ Add	Zone Del/ Add	✓	✓	✓	N/A	N/A
Zone Down	-	✓	N/A	✓	✓	✓
Zone Up	-	✓	N/A	✓	✓	✓

\*1 Functions available on Portable transceivers only.

\*2 Functions available on Mobile transceivers only.

\*3 Functions applicable only to 5-tone calls.

\*4 Emergency can be programmed only on the Auxiliary (orange) button on Portable transceivers, the Auxiliary (▲) button on Mobile transceivers and the optional speaker/ microphone PF 1 (orange) button.

\*5 Site Select and System Select can be programmed only on the Selector knob on Portable transceivers.

\*6 Group, Group + Short Message, Group + Status, Individual, Individual + Short Message and Individual + Status function as Selcall in FleetSync systems and 5-tone Signaling.

# CHARACTER ENTRY

While in the character entry screen, you can use the following two methods to enter the characters:

## ■ Pressing the [▲]/[▼] buttons

Press [▲]/[▼] to cycle the characters from A ~ Z, a ~ z, 0 ~ 9, and a space (default settings).

You can also assign a character to an optional button and later press that button to recall the assigned character: A ~ Z, a ~ z, 0 ~ 9, or a space and characters.

- You can enter characters using the [▲]/[▼] buttons when the buttons function as character input buttons. When the buttons function as line up/down buttons, it is not possible to enter a character.

## ■ Using the keypad

**(Full button model Portable transceivers and Mobile transceivers with microphone with keypad only)**

Press the keypad buttons to enter characters as shown in the table below.

You can press the [\*] button repeatedly to switch the input mode (upper case → lower case → numbers → back to beginning).

Keypad	Character Cycle (Upper Case)	Character Cycle (Lower Case)
1	@ # " ( ) ! \$ _	@ # " ( ) ! \$ _
2	A B C	a b c
3	D E F	d e f
4	G H I	g h i
5	J K L	j k l
6	M N O	m n o
7	P Q R S	p q r s
8	T U V	t u v
9	W X Y Z	w x y z
0	(space) . , ? / ' &	(space) . , ? / ' &

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## FUNCTIONS OVERVIEW

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Following is a brief overview of the functions available on the transceiver accessible using the Menu and/or programmable to the transceiver buttons.

For details on functions that are not included in “FUNCTION DETAILS” {p. 33} , please contact your dealer.

- Texts in the < > brackets are the displays for the button guides.
- Some functions may not be available depending on the transceiver used.
  - \*1: Functions available on Portable transceivers only.
  - \*2: Functions available on NX-3200/ NX-3300 only.
  - \*3: Functions available on Mobile transceivers only.

### ■ None

No function has been programmed.

### ■ 2-tone <2-tone>

Allows you to quickly call the 2-tone list that have been programmed onto your transceiver.

### ■ Activity Detection <ActDet> \*1

Enables or disables Activity Detection. If an event occurs while Activity Detection is enabled, the transceiver enters Emergency mode.

### ■ Activity Reset <ActRst> \*1

While Activity Detection is active, press this button to reset the Activity Detection countdown timer. This allows you to remain in a tilted or stationary position, etc., without activating the Emergency mode unnecessarily.

### ■ ANR Preset

Cancels the background noise to improve the audio quality during transmission.

### ■ Audio Profile

Allows you to select a preferred preset profile that suits the operating environment and operating condition of the transceiver.

### ■ Auto Telephone <AtTel>

Automatically searches and connects to a telephone repeater that can be connected in LTR Trunking system.

### ■ Autodial <AtDial>

Allows you to quickly call telephone numbers that have been programmed onto your transceiver. Refer to “Autodial” {p. 37} .

### ■ Autodial Programming <DialPg>

Allows you to edit the Autodial list.

## ■ AUX <AUX> \*1, \*2

Toggles the auxiliary port ON and OFF. When toggled on, the optional feature connected to the auxiliary port will be activated and the  indicator will appear on the display.

## ■ AUX A <AUX\_A> \*3

Toggles the auxiliary port A ON and OFF. When toggled on, the optional feature connected to the auxiliary port A will be activated and the  indicator will appear on the display.

## ■ AUX B <AUX\_B> \*3

Toggles the auxiliary port B ON and OFF. When toggled on, the optional feature connected to the auxiliary port B will be activated and the  indicator will appear on the display.

## ■ AUX C <AUX\_C> \*3

Toggles the auxiliary port C ON and OFF. When toggled on, the optional feature connected to the auxiliary port C will be activated and the  indicator will appear on the display.

## ■ AUX Output ID 1 ~ 3 <AUX 1 ~ AUX 3> \*3

Toggles the auxiliary output ID port ON and OFF. When toggled on, the optional feature connected to the auxiliary port will be activated and the ID name will appear on the display.

## ■ Backlight <Light> \*1

Press this button to turn the display backlight on or off. If Auto backlight is activated by your dealer, the backlight can be set to activate by button operations or when receiving a call/ message.

## ■ Battery Status <Battry> \*1

Allows you to view the battery power status. Battery status is represented by the number of times the LED indicator flashes red. Four flashes represents full power, three represents medium power, two represents low power, and one represents very low power. If the LED flashes red only one time, recharge or replace your battery pack immediately. When the Low Battery Warning function is active {p. 53} and the battery power is low, this button will not operate.

If the Battery Level Tone has been enabled, a beep tone will sound according to the number of flashes from the LED.

## ■ Bluetooth <Btooth>

Enables or disables the Bluetooth function. Refer to “Bluetooth” {p. 56} .

## ■ Bluetooth Connect/ Disconnect <BtConn/ BtDisc>

Press this button to pair with the selected Bluetooth device when a Bluetooth device is not connected. When a Bluetooth device is connected, press this button to disconnect the Bluetooth device.

## ■ Bluetooth Device

Activates Bluetooth Device mode.

## ■ Bluetooth Discoverable

Allows the transceiver to respond to the search for Bluetooth-enabled devices.

## ■ Bluetooth Headset Connection Type

Allows you to select the type of Bluetooth headset to be connected to the transceiver via HSP connection.

## ■ Bluetooth Information

Allows you to display the Bluetooth device name of the transceiver.

## ■ Bluetooth Speaker <BtSpkr>

Allows you to switch the speaker from the transceiver's built-in speaker to the speaker of a connected Bluetooth device.

## ■ Broadcast <B.Cast>

Allows you to make a Broadcast Group Call. Switches between Broadcast Group Call and Conference Group Call when Broadcast Group Call is enabled.

## ■ Button Lock <BtnLck>

Press this button to lock the transceiver buttons. Press the button again to unlock. The following will still function and can be operated as per normal.

Portable : Selector \*, Backlight, Battery Status, Call Response, Clear, Emergency, Function, Button Lock, LCD Brightness, Monitor, Monitor Momentary, Squelch Off, Squelch Off Momentary and Zeroize buttons as well as PTT button on an external microphone or a Bluetooth device.

Mobile : Power switch, Auxiliary Input, Hook, Call Response, Clear, Emergency, Function, Button Lock, LCD Brightness, Monitor, Monitor Momentary, Squelch Off, Squelch Off Momentary and Zeroize buttons as well as PTT button on an external microphone or a Bluetooth device.

\* Your dealer can program the Selector to lock upon pressing this button. However, the locking of the Selector is available only on the Full button and Standard button models.

## ■ Call 1 ~ 6 <Call1 ~ Call6>

Press this button to send a message or initiate a call.

## ■ Call Interruption <Intrpt>

Allows a transceiver other than the transmitting transceiver to terminate voice communications by sending and receiving a Call Interruption request message. If a transceiver receives a Call Interruption request message on the channel where the transceiver is performing voice communications, the transceiver terminates the voice communications.

## ■ Call Response <CalRes>

Press this button to respond to an Individual Call. When an Individual Call is received, the Alert tone stops.

### ■ Channel Down <CH->

Press this button to decrease the channel number. {p. 4}

### ■ Channel Entry <CH\_Ent>

Press this button to enter Channel Entry Mode, to select a channel.

### ■ Channel Information <ChInfo>

Allows you to cycle through the display information as follows: Channel name > Zone-channel number > Frequency > QT/DQT > RAN

### ■ Channel Recall <CH\_Rcl>

Press this button during Scan to return to the last called zone and channel.

### ■ Channel Up <CH+>

Press this button to increase the channel number. {p. 4}

### ■ Clear <Clear>

Press this button to end a call or cancel a data transmission.

### ■ Clock <Clock>

Refer to "CLOCK" {p. 44} .

### ■ Clock Adjustment <ClkAdj>

Allows you to set the clock. Refer to "CLOCK" {p. 44} .

### ■ CW Message <CW\_Msg>

Press this button to send the CW message.

### ■ Dialing <Dial>

Activates Dialing mode and allows you to enter a dialing code directly to make a call.

### ■ Digit 10x Down <10x->

Press this button to decrease the Selcall number by 10 with each press.

### ■ Digit 10x Up <10x+>

Press this button to increase the Selcall number by 10 with each press.

### ■ Digit 1x Down <1x->

Press this button to decrease the Selcall number by 1 with each press.

### ■ Digit 1x Up <1x+>

Press this button to increase the Selcall number by 1 with each press.

### ■ Direct Channel 1 ~ 5 <DR1 ~ DR5>

Press one of these buttons to jump to a frequently used zone and channel (pre-programmed by your dealer). If activated by your dealer, you can set your own Direct Channels by selecting your desired zone and channel using Direct Channel 1 ~ 5 Select.

## ■ Direct Channel 1 ~ 5 Select

Allows you to set the currently selected zone and channel as the Direct Channel 1 ~ 5.

## ■ Display Format <Disp>

Allows you to switch the display between the zone-channel number and the channel name.

## ■ Display Type \*1

Refer to “DISPLAY TYPE (Portable transceivers only)” {p. 46} .

## ■ Emergency

Refer to “EMERGENCY CALLS” {p. 39} .

## ■ External Mic Sense

Activates External Mic Sense mode.

## ■ External Speaker <Spkr>

Switches the speaker from the transceiver’s built-in speaker to an optional external speaker.

## ■ Fixed Volume <FixVol>

Allows you to change the volume level of the tone.

## ■ Front Panel Programming <FPP>

Activates Front Panel Programming mode. This mode allows you to change the frequency and other data of a Conventional channel and to add new Conventional channels using your transceiver even when the FPU (Field Programming Unit) software or a computer is not available.

## ■ Function <Func>

Press this button, then press a programmable button to activate its secondary function.

## ■ GPS <GPS>

Enables or disables the GPS function.

## ■ GPS/ Bluetooth Reset

Activates GPS/ Bluetooth Reset mode.

## ■ GPS Position Display <GPS\_P>

Allows you to display your location data.

## ■ Group <Group>

Activates Group Call Mode.

## ■ Group + Short Message <Grp+SD>

Allows you to specify a Group ID to send short messages.

### ■ **Group + Status <Grp+ST>**

Allows you to specify a Group ID to send status messages.

### ■ **Group ID/ Channel Entry <GrpEnt>**

In NXDN Trunking systems, press this button to enter a Group ID. In other operating systems, this button functions the same as Channel Entry.

### ■ **High Transmit Power <High>**

Turns High Transmit Power on or off. When using a channel programmed with low or medium power, this allows you to change the output power to high.

### ■ **Home Channel <Home>**

Press this button to jump to your home zone and channel (pre-programmed by your dealer). If activated by your dealer, you can set your own Home Channel by selecting your desired zone and channel using Home Channel Select.

### ■ **Home Channel Select**

Allows you to set the currently selected channel to Home Channel.

### ■ **Horn Alert <HA> \*3**

Enables the Horn Alert terminal when a call is received. It activates the car headlights and horn to alert you of the incoming call when you are away from the transceiver.

### ■ **Individual <Indcal>**

Refer to “Making Individual Calls” {p. 6} {p. 7} .

### ■ **Individual + Short Message <Ind+SD>**

Allows you to specify a Unit ID to send short messages.

### ■ **Individual + Status <Ind+ST>**

Allows you to specify a Unit ID to send status messages.

### ■ **Key Delete <KeyDel>**

Allows you to delete the Encryption key. Refer to “DELETING THE ENCRYPTION KEY (AES/ DES or Enhanced Encryption only)” {p. 41} .

### ■ **Language**

Allows you to change the language of the text display on the LCD screen and the language of the voice announcement. Refer to “MULTI LANGUAGE” {p. 45} .

### ■ **LCD Brightness <Bright> \*3**

Allows you to adjust the brightness of the LCD backlight depending on the surrounding lighting conditions.

### ■ **Lone Worker <LoneWk>**

Enables or disables Lone Worker function.

### ■ **Low Transmit Power <Low>**

Turns Low Transmit Power on or off. When using a channel programmed with medium or high power, this allows you to change the output power to low.

### ■ **Maintenance <Maint>**

Allows you to display the signal strength, site information and Bit Error Rate (BER) on the LCD when constructing the system or during maintenance.

### ■ **Manual Site Hunt <M.Hunt>**

Enables or disables Manual Site Hunt function. Applicable to DMR Site Roaming only.

### ■ **Medium Transmit Power**

Turns Medium Transmit Power on or off. When using a channel programmed with low or high power, this allows you to change the output power to medium.

### ■ **Menu <Menu>**

Press this button to select and perform functions using the transceiver Menu.

### ■ **Mic Sense**

Allows you to change the microphone sensitivity.

### ■ **Microphone Type**

Allows you to select a microphone type that suits the optional external microphone connected.

### ■ **Monitor <Moni>**

Allows you to turn the transceiver signaling off, to listen to all calls that are received on the channel.

### ■ **Monitor Momentary <Moni>**

Press and hold this button to momentarily turn the transceiver signaling off. Releasing this button turns the transceiver signaling back on. While signaling is off, you can listen to all calls that are received on the channel.

### ■ **Operator Selectable Tone <OST>**

Refer to “Operator Selectable Tone (OST)” {p. 42} .

### ■ **OST Down <OST->**

Press this button to decrease the Operator Selectable Tone number of your selected channel.

### ■ **OST List**

Allows you to enter OST List mode.

### ■ **OST Up <OST+>**

Press this button to increase the Operator Selectable Tone number of your selected channel.

## ■ OVCM <OVCM> (Open Voice Channel Mode)

Allows the conversation of a received call to be heard even when the received ID does not match.

## ■ Playback <Play>

Refer to “Playback” {p. 67} .

## ■ Playback (Last Recording) <Play\_L>

Refer to “Playback” {p. 67} .

## ■ Priority-channel Select <OSP>

Allows you to set a channel as a priority channel.

## ■ Public Address <PA> \*3

Allows you to use the transceiver as a loudspeaker.

## ■ Redial <Redial>

Activates Redial mode and allows you to select a previously entered dialing code from the call history to redial a call.

## ■ Radio Check

Allows you to check whether the transceiver can be communicated or not.

## ■ Radio Inhibit

Allows you to inhibit the transceiver operation by remote control.

## ■ Radio Uninhibit

Allows you to uninhibit the transceiver operation by remote control.

## ■ Receive Entry <RX\_Ent>

Press this button to change a 5-tone code by entering the code directly.

## ■ Remote Control <Remote>

Allows you to remotely control a specified transceiver from this transceiver.

In the NXDN and DMR systems, it allows you to operate the transceiver directly, send a remote control message and control the target transceiver.

## ■ RX Audio Equalizer (High)

Allows you to set the audio response for high frequencies.

## ■ RX Audio Equalizer (High Midrange)

Allows you to set the audio response for high midrange frequencies.

## ■ RX Audio Equalizer (Midrange)

Allows you to set the audio response for midrange frequencies.

## ■ RX Audio Equalizer (Low Midrange)

Allows you to set the audio response for low midrange frequencies.

## ■ RX Audio Equalizer (Low)

Allows you to set the audio response for low frequencies.

## ■ RX Auto Gain Control

Allows you to set the transceiver to automatically adjust the volume of the receiving sound to a specific level for easy listening.

## ■ Save Log Data <Log>

Allows you to save the operation and communication logs of this transceiver.

## ■ Scan <Scan>

Refer to “SCAN” {p. 33} .

## ■ Scan Delete/ Add <D/A>

Allows you to include or omit each channel in the scan sequence.

## ■ Scan Normal <ScnNrm>

Allows you to forcibly perform a non-priority scan even when priority scan has been set.

## ■ Scan Program <ScnPrg>

Allows you to reprogram the Scan List and Priority channels using your transceiver. Refer to “SCAN PROGRAMMING” {p. 34} .

## ■ Scrambler/ Encryption <Scr/ Encryp>

Allows you to prevent a third party from listening in on your call. Refer to “SCRAMBLER (ANALOG/ LTR)/ ENCRYPTION (NXDN/ DMR)” {p. 40} .

## ■ Scrambler/ Encryption Code

Allows you to change the scrambler code used in the transmission. Refer to “SCRAMBLER (ANALOG/ LTR)/ ENCRYPTION (NXDN/ DMR)” {p. 40} .

## ■ Send the GPS Data <GPS\_TX>

For Portable transceivers, this allows you to send your positioning data to the base station when a GPS unit has been installed.

For Mobile transceivers, this allows you to send your positioning data to the base station. However, the following must be noted.

- When using the NX-3720G, NX-3720HG, NX-3820G, NX-3820HG, you must connect a KRA-40 GPS antenna.
- When using the NX-3720, NX-3720H, NX-3820, NX-3820H, you must connect an external GPS unit.
- When the power is turned ON and/or the reception condition of the GPS satellite is poor, positioning may take longer to complete.
- When using the built-in GPS Receiver, “GPS Ant Fail” appears on the display if the GPS antenna is not connected or the connection is abnormal (e.g. short circuit).

## ■ Short Message <SDM>

Allows you to send short messages such as an address, telephone number, etc.

### ■ Site Down <Site->

Press this button to decrease the site number.

### ■ Site Lock <SiteLk>

Allows you to lock the current site. The transceiver will not be able to search for alternate sites, and “Site Lock” appears on the display.

### ■ Site Number

This displays the site number.

### ■ Site Select

Allows you to select the site to lock.

### ■ Site Up <Site+>

Press this button to increase the site number.

### ■ Speaker Attenuation <SP Atn>

Press this button to attenuate received voice signals. This reduces the strength of the speaker output to cut back any noise and distortion present in the signal.

### ■ Speaker Type

Allows you to select a speaker type that suits the optional external speaker connected.

### ■ Squelch Level <SQL>

Allows you to adjust the transceiver squelch level.

When adjusting the squelch level, use the [▲] and [▼] buttons to increase and decrease the squelch level from 0 (open) to 9 (tight). The default setting is 5.

### ■ Squelch Off <SQ\_Off>

Allows you to turn the transceiver squelch off, to better hear weak signals on the channel.

### ■ Squelch Off Momentary <SQ\_Off>

Press and hold this button to momentarily turn the transceiver squelch off. Releasing this button turns the transceiver squelch back on. While squelch is off, you can better hear weak signals on the channel.

### ■ Stack <Stack>

Allows you to check the records of received calls and messages received.

### ■ Status <Status>

Allows you to send status messages selected from the Status List.

### ■ Surveillance <SrvInc>

Allows you to disable the alert, tone, backlight and LED functions.

### ■ System Down <Sys->

Press this button to select a previous system name and enable System Lock to the system selected.

### ■ System Lock <Sys Lk>

Allows you to lock the current system via button operation so that it does not roam to other systems in Multi-System Roaming.

### ■ System Search <Search>

Allows you to view the current Trunking site. With the site displayed, press and hold the button programmed as **[System Search]** to enter Search mode. The transceiver begins searching for a new site and "Search" appears on the display. When a site is found, searching ends and the transceiver switches to the new site.

### ■ System Select

Allows you to select the system to lock.

### ■ System Up <Sys+>

Press this button to select a succeeding system name and enable System Lock to the system selected.

### ■ Tactical Zone <Tac>

Allows you to register the selected channel to form a new group (Tactical Zone).

### ■ Talk Around <TA>

Allows you to toggle Talk Around ON and OFF. Talk Around redirects the transceiver signals directly to other party members rather than relaying the signals through a repeater.

### ■ Task Request Confirmation <Task>

Allows you to check a received Task Request message (up to 290 characters) and respond to the message in the Task Request function.

The Task Request function manages tasks by using the Short Message function. The task administrator sends the operator a Task Request message of which the operator will check the instructions in the message and return a response message such as task started, task ended or rejected to the task administrator. This allows the task administrator to keep track of the progress of the operator. For details, consult your dealer.

### ■ Telephone Disconnect <Disc>

Allows you to disconnect the public telephone line connected through a repeater in LTR Trunking system.

### ■ Transceiver Password <Passwd>

Allows you to set a password to lock the transceiver.

### ■ Transfer <Trs> \*3

Allows the transceiver to transfer a specific code when a 5-tone code is received.

### ■ TX Audio Equalizer (High)

Allows you to set the audio response for high frequencies.

### ■ TX Audio Equalizer (High Midrange)

Allows you to set the audio response for high midrange frequencies.

### ■ TX Audio Equalizer (Midrange)

Allows you to set the audio response for midrange frequencies.

### ■ TX Audio Equalizer (Low Midrange)

Allows you to set the audio response for low midrange frequencies.

### ■ TX Audio Equalizer (Low)

Allows you to set the audio response for low frequencies.

### ■ TX Auto Gain Control

Allows you to set the transceiver to automatically adjust the microphone sensitivity for easy listening.

### ■ Vibrator <Vib> \*1, \*2

Allows you to toggle the vibrator function ON and OFF. When the vibrator is on, the transceiver will vibrate when a call is received.

### ■ Volume Down <Vol-> \*3

Press this button to decrease the volume level.

### ■ Volume Up <Vol+> \*3

Press this button to increase the volume level.

### ■ VOX <VOX>

Allows you to adjust the VOX Gain level.

### ■ VOX Function

Activates the VOX function. Refer to “VOICE OPERATED TRANSMISSION (VOX)” {p. 52} .

### ■ Zeroize <Zero>

Allows you to delete all the Encryption keys configured with AES/ DES Advanced Encryption and Enhanced Encryption.

### ■ Zone Delete/ Add <Zn\_D/A>

Allows you to include or omit each Zone in the Multi-Zone scan sequence.

### ■ Zone Down <Zone->

Press this button to decrease the zone number. {p. 4}

### ■ Zone Up <Zone+>

Press this button to increase the zone number. {p. 4}

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## FUNCTION DETAILS

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### SCAN

Scan is useful for monitoring signals on the transceiver channels. While scanning, the transceiver checks for a signal on each channel and only stops on a channel if a signal is present.

To begin scanning, press the button programmed as [**Scan**].

- The  indicator appears on the display.
- On Portable transceivers and if programmed by your dealer, the LED indicator blinks during scanning.
- The channels are scanned.
- When a signal is detected on a channel, Scan pauses on that channel. The transceiver will remain on the busy channel until the signal is no longer present. When the signal “drops out”, the transceiver will remain on the channel momentarily before Scan resumes. This delay time is programmed by your dealer. If a signal is received during the delay time, the transceiver will remain on the same channel.

To stop scanning, press the [**Scan**] button again.

---

#### Note:

- In order for Scan to operate, there must be at least 2 channels added to the scanning sequence. If there are less channels than this, Scan will not operate.
- 

### TEMPORARY CHANNEL LOCKOUT

During scan, you can temporarily remove specific channels from the scanning sequence by selecting them and pressing the button programmed as [**Scan Delete/Add**].

- The  indicator no longer appears on the display for that channel.
- The channel is no longer scanned. However, when scanning is ended and restarted, the channels will reset and the channel will again be in the scanning sequence.

### PRIORITY SCAN

A Priority channel must be programmed in order for Priority Scan to function.

When using a single Priority channel, the transceiver will automatically change to the Priority channel when a call is received on it, even if a call is being received on a normal channel.

When using dual Priority channels, Priority channel 1 is given precedence over Priority channel 2. So, if a call is received on Priority channel 1 while a call is already on Priority channel 2, the transceiver will automatically change to Priority channel 1.

- “**P1**” or “**P2**” appears on the display when the channel is Priority channel 1 or 2 respectively.

## SCAN REVERT

The Scan Revert channel is the channel selected when you press the **PTT** switch to transmit during scan. Your dealer can program one of the following Scan Revert channels:

- **Selected:** The last channel selected is assigned as the new revert channel.
- **Selected + Talkback:** If the channel has been changed, the newly selected channel is assigned as the new revert channel. The transceiver “talks back” on the current channel.
- **Priority 1/ Priority 2:** If your dealer has programmed a Priority channel (either Priority 1 or Priority 2), this channel is the revert zone and channel.
- **Priority 1 + Talkback/ Priority 2 + Talkback:** If your dealer has programmed a Priority channel (either Priority 1 or Priority 2), this channel is the revert zone and channel. The transceiver “talks back” on the current receive channel.
- **Last Called + Selected:** The last channel on which you received a call is assigned as the new revert channel. The transceiver “talks back” on the current channel. If the channel has been changed, the newly selected channel is assigned as the new revert channel.

## SCAN PROGRAMMING

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### Note:

- Scan programming is only available when Scan Type has been set to “List”.
- 

### ■ Scan List Editing

You can reprogram your scan list to add or delete any zones or channels.

- 1 Select the channel where the scan list to be edited has been set, press the button programmed as [**Scan Program**] to enter Scan Program Mode.  
Alternatively, press the button programmed as [**Menu**] to enter Scan Program Mode using the Menu Mode.
  - 2 Press the [◀] and [▶] buttons to select the zone or the [▲] and [▼] buttons to select the channel you will add to or remove from the scan list.
  - 3 Press the [□] or [\*] button to confirm your selection.
    - The ▼ indicator appears on the display when a zone is added to the scan list, and disappears when a zone is removed from the scan list.
    - The ▼ indicator appears on the display when a channel is added to the scan list, and disappears when a channel is removed from the scan list.
  - 4 Press the [🏠] button to exit scan programming.
- 

### Note:

- A zone/ channel cannot be added to the scan list in the following cases.
    - When it has already been added to the scan list.
    - When a channel that is not compatible with the Scan Type in the Scan List setting has been selected.
  - A zone/ channel cannot be deleted from the scan list in the following cases.
    - When the channel to be deleted is a Priority channel.
    - When there is no added channel in the scan list.
-

## ■ Priority Channel Editing

If the Priority channel (Priority 1/ Priority 2) has been set as Operator Selectable by your dealer, you can reprogram the Priority channels.

---

### Note:

- A zone/ channel must be added to the scan list before the channel can be set as a Priority channel.
- 
- 1 Select the channel where the scan list to be edited has been set, press the button programmed as **[Scan Program]** to enter Scan Program Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Scan Program Mode using the Menu Mode.
  - 2 Press the [**↵**] button to edit the Priority channel.
  - 3 Press the [**▲**] and [**▼**] buttons to select the desired priority.
  - 4 Press the [**□**] or [**\***] button to confirm your selection.
  - 5 Press the [**🏠**] button to exit scan programming.

# DTMF (DUAL TONE MULTI FREQUENCY) CALLS

## Note:

- DTMF calls can be made only in Analog Conventional, NXDN (Conventional/ Trunking) and LTR Trunking Operations.
- Manual Dialing and Keypad Auto PTT are available only on full button model Portable transceivers and Mobile transceivers with microphone with keypad.

## MAKING A DTMF CALL

### ■ Manual Dialing

- 1 Press and hold the **PTT** switch.
- 2 Enter the desired digits using the DTMF or microphone keypad.
  - The corresponding DTMF tones sound each time you press a button.
  - If you release the **PTT** switch, transmit mode will end even if the complete number has not been sent.

### ■ Keypad Auto PTT

If your dealer has activated the Keypad Auto PTT function, simply press the buttons on the keypad or microphone to make the call.

- The DTMF code will be sent automatically when you press a button.

### ■ Store & Send

- 1 Enter the desired digits using the DTMF or microphone keypad.
  - The digits appear on the display as you enter them.
  - You can enter digits by using the [▲] and [▼] buttons. Press these buttons to cycle through the DTMF digits.
  - You can enter up to 34 digits before transmitting.
- 2 After entering the complete number, press the **PTT** switch to transmit.

## Note:

- If you switch the power OFF before transmitting the number, the number will be cleared.

### ■ Stun Code

This function is used when a transceiver is stolen or lost.

When the transceiver receives a call containing a stun code, either the transmit mode or both the receive and transmit mode will be disabled. The stun code is canceled when the transceiver receives a call with a revive code.

## MAKING A TELEPHONE CALL (NXDN TRUNKING)

### ■ Autodial

Autodial allows you to quickly call numbers that have been programmed onto your transceiver.

- 1 Press the button programmed as **[Autodial]** to enter Autodial Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Autodial Mode using the Menu Mode.
  - The first entry in the Autodial list appears on the display.
- 2 Press the **[▲]** and **[▼]** buttons to select your desired Autodial list number.
- 3 Press the **PTT** switch to make the call.

### ■ Autodial Programming

You can reprogram your Autodial list to add or delete any DTMF Codes.

- 1 Press the button programmed as **[Autodial Programming]** to enter Autodial Programming Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Autodial Programming Mode using the Menu Mode.
  - The first entry in the Autodial list appears on the display.
- 2 Press the **[▲]** and **[▼]** buttons to select your desired list.
- 3 Press the **[↵]** or **[#]** button to delete the Autodial list.
- 4 Press the **[□]** or **[\*]** button to edit the Autodial list.
- 5 Press the **[□]** or **[\*]** button to confirm your selection.
- 6 Press the **[⬆]** button to exit Autodial Programming Mode.

### ■ Manual Dialing

- 1 Press the button programmed as **[Autodial]** to enter Autodial Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Autodial Mode using the Menu Mode.
  - The last called unit appears on the display.
- 2 Press the **[↵]** button to enter manual input mode.
  - To return to the Autodial list, press the **[↵]** button again.
- 3 Enter your desired number.
  - You can select a digit by using the **[▲]** and **[▼]** buttons, and then set the selected digit by pressing the **[□]** button. Repeat this process to enter the entire number.  
Alternatively, on full button model Portable transceivers or Mobile transceivers with microphone with keypad, you can enter the number directly.
  - To delete the number entered, press the **[↵]** button to delete one digit, or press and hold the **[↵]** button to delete all digits.
- 4 Press the **PTT** switch to make the call.
- 5 To end the call, press the button programmed as **[Clear]**.

## ■ Selecting a Number from the List

- 1 Press the button programmed as **[Autodial]** to enter Autodial Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Autodial Mode using the Menu Mode.
  - The last called unit appears on the display.
- 2 Press the **[▲]** and **[▼]** buttons to select your desired list number.
- 3 Press the **PTT** switch to make the call.

## MAKING A TELEPHONE CALL (LTR TRUNKING)

### ■ Manual Dialing

- 1 Select the desired zone and telephone group ID.
- 2 Press the **PTT** switch to start the call.
- 3 Enter the desired number using the DTMF keypad.

### ■ Autodial

- 1 Select the desired zone and telephone group ID.
- 2 Press the button programmed as **[Autodial]** to enter Autodial Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Autodial Mode using the Menu Mode.
  - The last called unit appears on the display.
- 3 Press the **[▲]** and **[▼]** buttons to select your desired list number.
- 4 Press the **PTT** switch to make the call.

## RECEIVING A TELEPHONE CALL

- 1 When a call is received, "Phone Call" will appear on the display.
- 2 Press and hold the **PTT** switch to speak, and release it to receive.
  - Only one person can speak at a time.
- 3 To end the call, press the button programmed as **[Clear]**.

## MAKING A STATUS CALL

- 1 Select your desired zone and channel.
- 2 Press the button programmed as **[Status]** to enter Status mode.  
Alternatively, press the button programmed as **[Menu]** to enter Status mode using the Menu Mode.
- 3 Press the **[▲]** and **[▼]** buttons to select the status ID you want to transmit.
- 4 Press the **PTT** switch or the **[□]** button to initiate the Status call.
  - After the status call has been successfully received by the called unit, "Complete" appears on the display.

# EMERGENCY CALLS

If your transceiver has been programmed with the Emergency function, you can make emergency calls.

---

**Note:**

**Portable**

- Only the Auxiliary (orange) button and the PF 1 (orange) button of the optional speaker/microphone can be programmed with the Emergency function. (NX-3200/ NX-3300 only)

**Mobile**

- Only the Auxiliary (▲) button can be programmed with the Emergency function.
- 

- 1** Press and hold the button programmed as **[Emergency]**.
    - Depending on the delay time programmed into your transceiver, the length of time you must hold the Emergency button will vary.
    - When the transceiver enters Emergency mode, the transceiver will change to the Emergency channel and begin transmitting based on how the transceiver is set up by your dealer. Transmit periods are also set by your dealer.
  - 2** To exit Emergency mode, press and hold the **[Emergency]** button again.
    - If the Emergency mode completes a preset number of cycles, Emergency mode will automatically end and the transceiver will return to the zone and channel that was in use before Emergency mode was entered.
- 

**Note:**

- Your dealer can set the transceiver to emit a tone when Emergency mode starts and stops.
  - Your dealer can set the transceiver to emit tones and received signals as normal or mute the speaker during Emergency operation.
-

# SCRAMBLER (ANALOG/ LTR)/ ENCRYPTION (NXDN/ DMR)

## Note:

- The Scrambler function can be used only in Analog Conventional and LTR Trunking Operation.
- The following types of encryption are available depending on the system used.  
NXDN : Bit scrambling (built-in encryption function), 56-bit DES and 256-bit AES  
DMR : Bit scrambling (built-in encryption function), 56-bit DES, 256-bit AES and Enhanced Encryption
- Ask your dealer for details concerning the Encryption DES/ AES and Enhanced Encryption settings.

## SECURE (ENCRYPTED) TRANSMISSION

Press the button programmed as [**Scrambler/ Encryption**] to switch the transceiver to secure (encrypted) transmission.

Alternatively, press the button programmed as [**Menu**] to enter Scrambler/ Encryption Mode using the Menu Mode.

- The Scrambler indicator (◆) or Encryption indicator (◆)\* appears when the respective function is turned ON.
- Pressing the **PTT** switch after the Scrambler or Encryption function has been turned ON encrypts the transmitted signal.

\* The indicator displayed varies depending on the type of Encryption function activated. Refer to "INDICATOR LIST" {p. 68}.

## SELECTING THE SCRAMBLER CODE

- 1 Press the button programmed as [**Scrambler/ Encryption Code**] to enter Scrambler/ Encryption Code Mode.  
Alternatively, press the button programmed as [**Menu**] to enter Scrambler/ Encryption Code Mode using the Menu Mode.
- 2 Press the [▲] and [▼] buttons to increase or decrease the Scrambler code.
  - Up to 16 Scrambler codes can be used.
- 3 Press the [□] or [\*] button to set the new Scrambler code.

## SELECTING THE ENCRYPTION KEY

- 1 Press the button programmed as [**Scrambler/ Encryption Code**] to enter Scrambler/ Encryption Code Mode.  
Alternatively, press the button programmed as [**Menu**] to enter Scrambler/ Encryption Code Mode using the Menu Mode.
- 2 Select the new Encryption key using the [▲] and [▼] buttons.
  - Up to 32 Encryption keys can be used. One of these keys will be used during transmission.
- 3 Press the [□] or [\*] button to set the new Encryption key.

## Note:

- In NXDN systems, a key error will be displayed when a Key ID which is 0x40 and above is selected for the AES/DES encryption function.
- To restore to the default Encryption key, select "Preset". However, if you delete the Encryption key, it will not be recovered.

## DELETING THE ENCRYPTION KEY (AES/ DES or Enhanced Encryption only)

- 1 Press the button programmed as **[Key Delete]** to enter Key Delete Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Key Delete Mode using the Menu Mode.
  - 2 Select the Encryption key to be deleted using the **[▲]** and **[▼]** buttons.
  - 3 Press the **[↵]** or **[#]** button to delete the Encryption key.
  - 4 Press the **[□]** or **[\*]** button to confirm and exit Key Delete Mode.
- 

### Note:

- To delete all Encryption keys (when more than one key has been set up), press and hold the **[↵]** or **[#]** button for 1 second.
- 

## PASSWORD PROTECTION

If the transceiver is password protected, entering an incorrect password successively 15 times will automatically delete all the Encryption keys.

- Turning the transceiver power OFF and the ON again will not reset the number of attempts for entering an incorrect password.

## QUIET TALK (QT)/ DIGITAL QUIET TALK (DQT)

Your dealer may have programmed QT or DQT signaling on your transceiver channels. A QT tone/ DQT code is a sub-audible tone/ code which allows you to ignore (not hear) calls from other parties who are using the same channel.

When a channel is set up with a QT tone or DQT code, squelch will only open when a call containing a matching tone or code is received. Likewise, signals that you transmit will only be heard by parties whose QT/ DQT signaling matches your transceiver.

If a call containing a different tone or code is made on the same channel you are using, squelch will not open and you will not hear the call. This allows you to ignore (not hear) these calls. Although it may seem like you have your own private channel while using QT/ DQT, other parties can still hear your calls if they set up their transceiver with the same tone or code.

### ■ Operator Selectable Tone (OST)

If a button has been programmed with **[Operator Selectable Tone]**, you can reprogram the QT tone or DQT code on each of your channels.

- 1 Select your desired channel.
- 2 Press and hold the button programmed as **[Operator Selectable Tone]**.
  - Alternatively, you can press the button programmed as **[Menu]** to enter OST Mode using the Menu Mode.
  - The **O** indicator appears on the display.
- 3 Press the **[▲]** and **[▼]** buttons to select your desired tone or code from 1 to 40.
- 4 Press the **[□]** button to save your new setting.

After selecting and setting up your desired tone or code, press the **[Operator Selectable Tone]** button to activate the OST function. Press this button again to turn the OST function off.

## RADIO ACCESS NUMBER (RAN)

RAN is a signaling system designed for digital radio communications.

When a channel is set up with a RAN, squelch will only open when a call containing a matching RAN is received. If a call containing a different RAN is made on the same channel you are using, you will not hear the call. This allows you to ignore (not hear) calls from other parties who are using the same channel.

## COLOR CODE (CC)

Color Code is a digital signaling for DMR system to enable smooth communication among groups using the same channel.

## OPTIONAL SIGNALING

Your dealer may also program several types of optional signaling for your transceiver channels.

### ■ 2-tone Signaling

2-tone Signaling opens the squelch only when your transceiver receives a call containing a matching 2-tone signal.

- 1 Press the button programmed as **[2-tone]**.
  - Alternatively, you can press the button programmed as **[Menu]** to enter 2-tone Mode using the Menu Mode.
- 2 Press the **[▲]** and **[▼]** buttons to select your desired list of 2-tone codes.
- 3 Press the **PTT** switch to make the call.

### ■ 5-tone Signaling (For E type only)

Refer to “5-TONE SIGNALING (For E type only)” {p. 50} .

### ■ DTMF Signaling

DTMF Signaling opens the squelch only when the transceiver receives a call containing a matching DTMF code.

### ■ MDC-1200 Signaling

MDC-1200 is a data system using Audio Frequency Shift Keying (AFSK).

### ■ FleetSync Signaling

FleetSync Signaling opens the squelch only when the transceiver receives a call that matches the FleetSync ID in FleetSync Signaling.

### ■ NXDN ID Signaling

NXDN ID is an optional signaling system available only for digital communications.

# CLOCK

Your transceiver can track the time with its built-in clock. If activated by your dealer, the time will be displayed when the transceiver power is turned ON.

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## Note:

- Removing or leaving the battery pack uncharged for extended periods will cause the clock time to clear.
- 

## CLOCK ADJUSTMENT

To set the time:

- 1 Press the button programmed as [**Clock Adjustment**] to enter Clock Adjustment Mode.  
Alternatively, press the button programmed as [**Menu**] to enter Clock Adjustment Mode using the Menu Mode.
  - The current time setting appears.
- 2 Press the [▲]/[▼] buttons to increase or decrease the month setting.
- 3 Press the [▶] button to set the month and cycle to the day setting.
- 4 Repeat steps 2 and 3 to set the day, year, hour, and minute.
- 5 Press the [□] button to exit Clock Adjustment mode.
  - You can press the [⏏] button at any time to exit Clock Adjustment mode.

## MULTI LANGUAGE

Your transceiver is equipped with multiple language support feature. You can change the language of the text display on the LCD screen and the language of the voice announcement. There are three languages available for selection; however, the languages selectable are dependent on the dealer setting. For details, consult your dealer.

- 1 Press the button programmed as **[Menu]** to enter Language Mode using the Menu Mode.
- 2 Press the [**▲**]/[**▼**] buttons to select the desired language.
- 3 Press the [**□**] or [**\***] button to confirm and exit Language Mode.
  - The language of the LCD screen display and the voice announcement changes to the language selected.

---

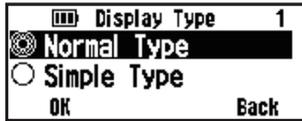
### Note:

- The language of the voice announcement may not change depending on the dealer setting. For details, consult your dealer.
-

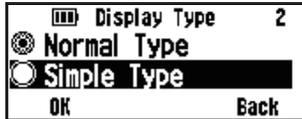
## DISPLAY TYPE (Portable transceivers only)

You can change the screen display to a simpler layout without the button guides.

- 1 Press the button programmed as [Menu] to enter Display Type Mode using the Menu Mode.



- 2 Press the [▲]/[▼] buttons to select “Normal Type” or “Simple Type”.



Normal Type



Simple Type



- 3 Press the [□] or [\*] button to confirm the selection.

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## FleetSync: ALPHANUMERIC 2-WAY PAGING FUNCTION

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FleetSync is an Alphanumeric 2-way Paging Function, and is a protocol owned by JVC KENWOOD Corporation. FleetSync enables a variety of paging functions on your transceiver, some of which depend on dealer programming.

### Note:

- This function is available only in analog operation.
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## SELCALL (SELECTIVE CALLING)

A Selcall is a voice call to a station or group of stations.

### ■ Transmitting

- 1 Select your desired zone and channel.
- 2 Press the button programmed as **[Individual]/ [Individual + Status]/ [Individual + Short Message]/ [Group]/ [Group + Status]/ [Group + Short Message]** to enter Selcall Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Selcall Mode using Individual/ Individual + Status/ Individual + Short Message/ Group/ Group + Status/ Group + Short Message in the Menu Mode.
- 3 Press the **[▲]** and **[▼]** buttons to select the station you want to call.
  - If Manual Dialing is enabled, you can enter the station ID by using the keypad on a full button model Portable transceiver or on the microphone of a Mobile transceiver.
- 4 Press the **PTT** switch and begin your conversation.

### ■ Receiving

An alert tone will sound and the transceiver will enter Selcall mode. The calling station's ID will appear when a Selcall is received. You can respond to the call by pressing the **PTT** switch and speaking into the microphone.

### ■ Identification Codes

An ID code is a combination of a 3-digit Fleet number and a 4-digit ID number. Each transceiver has its own ID.

- Enter a Fleet number (100 ~ 349) to make a fleet call.
- Enter an ID number (1000 ~ 4999) to make an individual call in your fleet.
- Enter a Group ID (which is programmed in the FPU) to make a group call.
- Enter a Fleet number followed by an ID number to make an individual call in your desired fleet (Inter-fleet call).
- Select "ALL" Fleet and "ALL" ID to make a call to all units (Broadcast call).
- Select "ALL" Fleet and enter an ID number to make a call to the selected ID in all fleets (Supervisor call).

## STATUS MESSAGE

You can send and receive 2-digit Status messages which may be decided in your talk group. Messages can contain up to 16 alphanumeric characters. Status messages range from 10 to 99 (80 ~ 99 are reserved for special messages). A maximum of 250 received messages can be stored in the stack memory of your transceiver. These saved messages can be reviewed after reception. Depending on your dealer settings, when the stack memory is full, either the oldest message will be erased when a new message is received or the new message will not be stored in the stack memory. The  indicator appears when a message is stored in the stack memory.

### ■ Transmitting

- 1 Select your desired zone and channel.
- 2 Press the button programmed as **[Status]** to enter Status mode (proceed to step 5), or **[Individual + Status]/ [Group + Status]** to enter Selcall mode (proceed to step 3).
- 3 Press the  and  buttons to select the station you want to call.
  - If Manual Dialing is enabled, you can enter the station ID by using the keypad on a full button model Portable transceiver or on the microphone of a Mobile transceiver.
- 4 Press the  button to enter Status mode.
- 5 Press the  and  buttons to select the status you want to transmit.
  - If Manual Dialing is enabled, you can enter the status ID by using the keypad on a full button model Portable transceiver or on the microphone of a Mobile transceiver.
- 6 Press the **PTT** switch to initiate the call.
  - “Complete” appears on the display when the status has been successfully transmitted.

### ■ Receiving

The  indicator will flash and a calling ID and status message will appear when a Status call is received. Press any button to return to normal operation.

### ■ Reviewing Messages in the Stack Memory

- 1 Press the button programmed as **[Stack]**, or press and hold the button programmed as **[Individual]**, **[Group]**, **[Status]**, **[Individual + Status]**, or **[Group + Status]** to enter Stack mode.
  - The category list is displayed.  
However, depending on the stack settings programmed by your dealer, the individual list (Caller ID, Status Message or Short Message) may be displayed instead of the category list. For details on the stack settings, consult your dealer.
  - The categories are identified as follows:  
 : Caller ID,  : Status Message,  : Short Message
- 2 Press the  and  buttons to select the desired category, then press the  or **[\*]** button.
  - The Caller ID list, Status Message list or Short Message list is displayed according to the category selected. Pressing the / buttons allows you to cycle the display information as follows.
    - While Caller ID list is displayed:  
: Caller ID > CH > Time Stamp  
: Caller ID > Time Stamp > CH

- While Status Message list or Short Message list is displayed:  
 [◀]: Message > Caller ID > CH > Time Stamp  
 [▶]: Message > Time Stamp > CH > Caller ID
- To delete the selected message, press the [↵] or [#] button. To delete all messages, press and hold the [↵] or [#] button for 1 second.

3 Press [⬆] to return to normal operation.

## SHORT MESSAGES

This transceiver can receive short data messages which contain a maximum of 48 characters.

- On Portable transceivers (full button model and standard button model) and Mobile transceivers, short messages received are displayed the same as Status messages and are stored in the same stack memory. A maximum of 32 or 128 short messages can be stored in the stack memory depending on the Short Message Stack setting.

## LONG MESSAGES

To send and receive long messages, you must connect the transceiver to a PC. Ask your dealer for details.

- Long messages can contain a maximum of 4096 characters.

## GPS REPORT

GPS data can be manually transmitted by pressing the button programmed as **[Send the GPS Data]**, or by accessing the Menu {p. 9}. If set up by your dealer, GPS data may be automatically transmitted at a preset time interval.

- When using the GPS function, you must first connect the GPS antenna. (NX-3720G, NX-3720HG, NX-3820G, NX-3820HG only)

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## 5-TONE SIGNALING (For E type only)

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5-tone Signaling is enabled or disabled by your dealer. This function opens the squelch only when the transceiver receives the 5 tones programmed in your transceiver. Transceivers that do not transmit the correct tones will not be heard.

### SELCALL (SELECTIVE CALLING)

A Selcall is a voice call to a station or group of stations.

#### ■ Transmitting

- 1 Select your desired zone and channel.
- 2 Press the button programmed as **[Individual]/ [Individual + Status]/ [Individual + Short Message]/ [Group]/ [Group + Status]/ [Group + Short Message]** to enter Selcall Mode.  
Alternatively, press the button programmed as **[Menu]** to enter Selcall Mode using Individual/ Individual + Status/ Individual + Short Message/ Group/ Group + Status/ Group + Short Message in the Menu Mode.
- 3 Press the **[▲]** and **[▼]** buttons to select the station you want to call.
  - If Manual Dialing is enabled, you can enter the station ID by using the keypad on a full button model Portable transceiver or on the microphone of a Mobile transceiver.
- 4 Press the button programmed as **[Call 1]** to **[Call 6]** and begin your conversation.

#### Note:

- You can also use the buttons programmed as **[Digit 1x Down]**, **[Digit 1x Up]**, **[Digit 10x Down]**, and **[Digit 10x Up]** to adjust the Selcall number. **[Digit 1x Up]** and **[Digit 1x Down]** increases and decreases the Selcall number by 1 respectively each time the button is pressed. **[Digit 10x Up]** and **[Digit 10x Down]** increases and decreases the Selcall number by 10 respectively each time the button is pressed.

#### ■ Receiving

When a call containing the correct tones is received, the transceiver will enter Selcall mode. An alert tone will sound and the calling station's ID appears on the display. Press any button to return to normal operation.

### STATUS MESSAGE

You can send and receive Status messages which may be decided in your talk group. Messages can contain up to 16 alphanumeric characters.

A maximum of 250 received messages can be stored in the stack memory of your transceiver.

#### ■ Transmitting

- 1 Select your desired zone and channel.
- 2 Press the button programmed as **[Status]** to enter Status mode (proceed to step 5), or **[Individual + Status]/ [Group + Status]** to enter Selcall mode (proceed to step 3).

- 3 Press the [▲] and [▼] buttons to select the station you want to call.
  - If Manual Dialing is enabled, you can enter the station ID by using the keypad on a full button model Portable transceiver or on the microphone of a Mobile transceiver.
- 4 Press the [▶] button to enter Status mode.
- 5 Press the [▲] and [▼] buttons to select the status you want to transmit.
  - If Manual Dialing is enabled, you can enter the status ID by using the keypad on a full button model Portable transceiver or on the microphone of a Mobile transceiver.
- 6 Press the button programmed as [Call 1] to [Call 6] to initiate the call.

## ■ Receiving

The  indicator will flash and a calling ID and status message will appear when a Status call is received. Press any button to return to normal operation.

## ■ Reviewing Messages in the Stack Memory

- 1 Press the button programmed as [Stack] to enter Stack mode.
  - The category list is displayed.
  - The categories are identified as follows:  
 : Caller ID,  : Status Message,  : Short Message
- 2 Press the [▲] and [▼] buttons to select the desired category, then press the [□] or [\*] button.
  - The Caller ID list, Status Message list or Short Message list is displayed according to the category selected. Pressing the [◀]/[▶] buttons allows you to cycle the display information as follows.
    - While Caller ID list is displayed:  
 [◀]: Caller ID > CH > Time Stamp  
 [▶]: Caller ID > Time Stamp > CH
    - While Status Message list or Short Message list is displayed:  
 [◀]: Message > Caller ID > CH > Time Stamp  
 [▶]: Message > Time Stamp > CH > Caller ID
  - To delete the selected message, press the [↵] or [#] button. To delete all messages, press and hold the [↵] or [#] button for 1 second.
- 3 Press [⏪] to return to normal operation.

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## VOICE OPERATED TRANSMISSION (VOX)

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VOX can be activated or deactivated by your dealer. VOX operation allows you to transmit hands-free.

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**Note:**

- ◆ To operate VOX on a Portable transceiver, you must use an optional headset.
  - ◆ To operate VOX on a Mobile transceiver, you must use an optional headset connected via the Bluetooth Headset Profile. Refer to “Bluetooth” {p. 56} .  
Microphones such as KMC-28 cannot be used to operate VOX.
- 

### ■ VOX Gain Level

Sets the Mic input sensitivity of the VOX operation.

- 1 Connect a headset to the transceiver.
- 2 Press the button programmed as **[VOX]**.
  - The current VOX Gain level appears on the display.
- 3 Press the **[▲]** or **[▼]** button to increase or decrease the VOX Gain level.
  - The VOX Gain can be adjusted from levels 1 to 10.
- 4 While adjusting the level, speak into the headset microphone to test the sensitivity level. (Your voice is not transmitted during this test procedure.)
  - When sound is recognized, the LED lights yellow.
- 5 Press the **[□]** button to save your new setting.

### ■ VOX Operation

- 1 Connect a headset to the transceiver.
    - The VOX function does not activate when a headset is not connected to the accessory terminal of the transceiver.
  - 2 Press and hold the button programmed as **[VOX]**.
    - Alternatively, you can press the button programmed as **[Menu]** to enter VOX Mode using the Menu Mode.
    - A beep will sound and the  indicator appears on the display.
  - 3 When you finish speaking, transmission ends.  
To turn the VOX function OFF, press and hold the button programmed as **[VOX]** button again.
    - A beep will sound and the  indicator will disappear from the display.
- 

**Note:**

- If a speaker/ microphone is connected to the transceiver while VOX is ON, and the VOX Gain Level is set to a sensitive level, louder received signals may cause the transceiver to transmit.
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## BACKGROUND OPERATIONS

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### TIME-OUT TIMER (TOT)

The Time-out Timer can be activated only on Conventional channels and in NXDN Trunking system. It is used to prevent any caller from using a channel for an extended period of time.

If you continuously transmit for a period of time that exceeds the programmed time, the transceiver will stop transmitting and an alert tone will sound. To stop the tone, release the **PTT** switch. Your dealer can program the TOT time in the range of 15 seconds to 20 minutes.

If programmed by your dealer, a pre-alert tone will sound before the timer expires. Also, if programmed by your dealer, you may have to wait for a short duration before you can continue to transmit. If you press the **PTT** switch before the timer has been reset, an alert tone will sound and the transceiver will not enter transmit mode.

### BATTERY SAVER

The Battery Saver function can be activated only on Conventional channels. It extends the battery life by reducing the battery consumption through intermittent monitoring of the presence of signals while on standby.

### LOW BATTERY WARNING

Low Battery Warning alerts you when the battery needs to be recharged.

Your dealer can set an alert tone to sound and the LED indicator to blink red when the battery power is low. On Portable transceivers, the battery power indicator displays the battery power remaining, as illustrated below.



High



Sufficient



Low



Very low

When the battery power is very low, recharge or replace the battery pack.

## SIGNAL STRENGTH INDICATOR

The signal strength indicator displays the strength of received calls.



Strong signal



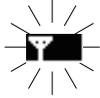
Sufficient signal



Weak signal



Very weak signal



Out of service range

(Appears on NXDN Trunking channels only)

## BUSY CHANNEL LOCKOUT (BCL)

On Conventional channels, if BCL is set up by your dealer, you will be unable to transmit on the channel if it is already in use. Under these circumstances, use a different channel or wait until the channel becomes free.

However, if BCL Override has also been programmed, you can transmit over the current signal:

- 1 Press and hold the **PTT** switch.
  - If the channel is already in use, a warning tone will sound.
- 2 Release the **PTT** switch, then press and hold the **PTT** switch again within half a second.
- 3 Speak into the transceiver as you would during a normal call.

## OUT OF RANGE

On NXDN Trunking channels, if set up by your dealer, the transceiver will indicate when it is out of range. When it can no longer communicate with any site, an out of range tone sounds and “Out of Range” appears on the display.

If enabled by your dealer, an In-service Tone will sound when an available control channel is detected after the out of range tone has sounded. For details on the in-service tone, consult your dealer.

## NETWORK FAILURE

On NXDN Trunking channels, if set up by your dealer, the transceiver will indicate a network condition on the registered site. “Network Fail” appears on the display when the transceiver receives a network disabled message.

## CONTROL CHANNEL HUNT

On NXDN Trunking channels, the transceiver must search for a control channel. While searching for a control channel, no signals can be received. The search begins automatically when you change to a Trunking channel.

- While hunting for a channel, the antenna indicator will flash. When a control channel has been found, the antenna indicator remains on the display without flashing.

## VOICE ANNOUNCEMENT

An audio voice will be announced as below by dealer setting.

- When changing the zone and/or channel, the new zone and channel number are announced.
- When changing the status, the new status is announced.
- When changing the function setting, the new setting is announced.

## VIBRATOR

**(For Portable transceivers NX-3200/NX-3300 only)**

When an optional external vibrator (KCT-48VU External Vibration Unit) is installed, the vibrator function will alert you when an optional signaling call is received. Press the button programmed as [**Vibrator**] or access the Menu {p. 9} to turn the Vibrator function on and off.

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## Bluetooth

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If your transceiver has been programmed with the Bluetooth function, you can connect your transceiver with a Bluetooth headset to make hands-free calls.

The Bluetooth specifications are as follows.

Version : Version 4.0

Power class : Class 2 (2.5 mW, up to 10 m)

Profile : Headset Profile (HSP), Serial Port Profile (SPP), Heart Rate Service\*, Automatic Injury Detection Service\*, Battery Service\*, Device Information Service\*

Refer to the table below for more details on each profile.

\*: Supported on Portable transceivers (full button model and standard button model) only

Device class : Phone

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### Note:

- The communication distance varies depending on the obstacles between the communication devices and the radio wave conditions.
- Only headsets which support the Headset Profile (HSP) certified by Bluetooth SIG can be used with the transceiver. However, operations are not guaranteed in all headsets.
- Refer to the following URL for details on the Bluetooth devices operationally tested by KENWOOD:

[http://manual2.jvckenwood.com/com/help\\_ref/nx5000\\_series/compatible\\_model\\_list/CNMJSYnnzoitpv.html](http://manual2.jvckenwood.com/com/help_ref/nx5000_series/compatible_model_list/CNMJSYnnzoitpv.html)

If you wish to use a Bluetooth device that is not operationally tested, please consult your dealer.

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If the Bluetooth Data setting is enabled by your dealer, you can use the Serial Port Profile, Heart Rate Service, Automatic Injury Detection Service, Battery Service and Device Information Service.

Profile	Description
Headset Profile (HSP)	Headset Profile provides support for Bluetooth headsets to be used with this transceiver for making voice calls.
Serial Port Profile (SPP)	Serial Port Profile allows this transceiver to connect to a Bluetooth-enabled PC without using a programming cable to communicate with the Field Programming Unit (FPU) or to use the PC Interface Protocol. For details on the Field Programming Unit (FPU) or PC Interface Protocol, consult your dealer.

Profile	Description
Heart Rate Service	Heart Rate Service is a function that sends the heart rate [bpm] to the transceiver from a Bluetooth-enabled device (such as heart rate monitor) that supports Heart Rate Service. The transceiver can send the heart rate via Status or activate the Emergency operation. When a Status request message is received from the Base Station, the transceiver can respond with the heart rate via Status or send the heart rate together with the GPS data via Status.
Automatic Injury Detection Service	Automatic Injury Detection Service is a function that notifies the transceiver from the Bluetooth-enabled device when the Bluetooth-enabled device that supports Automatic Injury Detection Service is damaged. Up to two Bluetooth-enabled devices can be connected to the transceiver at the same time. To use this service, it is necessary to enable the Injury Detection setting. For details, consult your dealer.
Battery Service	The transceiver displays the remaining battery power [%] of the Bluetooth-enabled device on the screen when a Bluetooth-enabled device that supports Heart Rate Service or Automatic Injury Detection Service is connected to the transceiver.
Device Information Service	The transceiver displays the information of the Bluetooth-enabled device such as manufacturer name and model number on the screen when a Bluetooth-enabled device that supports Heart Rate Service or Automatic Injury Detection Service is connected to the transceiver.

## ■ Selecting the Bluetooth headset type

You can select the type of Bluetooth headset to be connected to the transceiver via HSP connection.

- 1 Press the button programmed as [**Menu**] to enter Bluetooth Headset Connection Type Mode using the Menu Mode.
- 2 Press the [**▲**] and [**▼**] buttons to select the desired headset type.
- 3 Press the [**□**] or [**\***] button to confirm the selection.
  - The selection is backed up and will take effect the next time the transceiver is turned on.

### Note:

- If you exit the Bluetooth Headset Connection Type Mode without pressing the [**□**] or [**\***] button, the headset type selected will not be reflected in the menu setting.
- Most Bluetooth headsets can be connected and operated by selecting “Headset 1” in “Bluetooth Headset Connection Type”. For some headsets, it is necessary to select “Headset 2”. For details, refer to the following URL:  
[http://manual2.jvckenwood.com/com/help\\_ref/nx5000\\_series/compatible\\_model\\_list/CNMJSYnznzoitpv.html](http://manual2.jvckenwood.com/com/help_ref/nx5000_series/compatible_model_list/CNMJSYnznzoitpv.html)

## TURNING Bluetooth ON/ OFF

Press the button programmed as **[Bluetooth]** to turn the Bluetooth function on or off. Alternatively, press the button programmed as **[Menu]** to enter Bluetooth Mode using the Menu Mode.

Press the **[▲]** and **[▼]** buttons to select “On” or “Off”.

Press the **[□]** or **[\*]** button to confirm your selection.

- “\* ” appears on the display when the Bluetooth function is turned on. If a Bluetooth device is already connected to your transceiver, “📶” appears on the display.



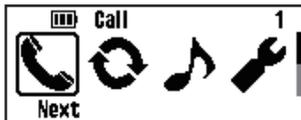
## FINDING Bluetooth DEVICES

Your transceiver can automatically search for Bluetooth devices.

### Note:

- Put your Bluetooth headset into pairing standby mode beforehand.

- 1 Press the **[□]** button to enter Menu Mode.



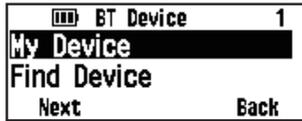
- 2 Press the **[□]** button to select the Bluetooth category.



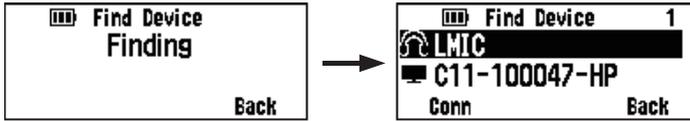
- 3 Press the **[□]** button or the **[▲]** and **[▼]** buttons to select “BT Device”.



- 4 Press the [□] button or the [▲] and [▼] buttons to select “Find Device”.



The transceiver starts to search for available Bluetooth devices. Up to 16 devices can be found and listed on the display.



- The search will end after approximately 30 or 40 seconds (depending on whether or not the Bluetooth Data setting is enabled by the dealer), or when 16 devices have been found.

## ■ Pairing Bluetooth devices

- 1 Press the [▲] and [▼] buttons to select the device to connect to. In this case, select the headset device.



- 2 Press the [□] or [\*] button to connect.



- 3 Press the [□] or [\*] button to start pairing.

Alternatively, you can pressed the button programmed as [Bluetooth Connect/Disconnect].

- The LED indicator blinks in blue.
- For Bluetooth devices that does not support Simple Secure Pairing, you need to enter a Personal Identification Number (PIN) code. You need to operate the Bluetooth headset to proceed with pairing.



When pairing is complete, your transceiver will connect to the Bluetooth headset. When the connection is established, you can perform hands-free call.

- The “📶” indicator appears on the display.



**Note:**

- Once the headset has been paired, it can be used automatically with the transceiver the next time the transceiver and headset are powered on. If the headset cannot be used automatically, connect manually using the My Device setting in the Bluetooth menu of the transceiver.  
(Some headset models cannot be used automatically.)
- Up to 10 Bluetooth devices can be registered to your transceiver.
- The pressing of the button programmed as Bluetooth Connect/ Disconnect does not affect the status of the Bluetooth connection via Serial Port Profile or Bluetooth Low Energy (Heart Rate Service, Automatic Injury Detection Service, Device Information Service and Battery Service).

## ■ Making hands-free call

Press the **PTT** switch to activate the microphone of the Bluetooth headset.

**Note:**

- The volume level can only be adjusted on the Bluetooth headset. The volume control of the transceiver does not function. However, if the audio is set to output from the built-in speaker of the transceiver in the Bluetooth Speaker setting, the volume level is controlled by the transceiver.
- The microphone sensitivity can be set using the External Mic Sense function.

## ■ Connecting to a PC

To connect to a PC using the Serial Port Profile, you have to make a request for connection from the PC to your transceiver. The transceiver will start to connect once it received the request from the PC.

Once the connection has been established, your transceiver can start communicating with the Field Programming Unit (FPU) or you can use the PC Interface Protocol.

- The “📶” indicator appears on the display.



The transceiver transits to each mode when the FPU communication begins. To use the PC Interface Protocol, run the PC commands.



## USEFUL FUNCTIONS

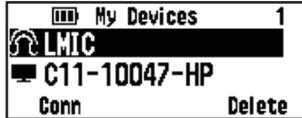
There are some useful functions on your transceiver which allows you to display information of the Bluetooth devices registered to the transceiver and to switch the speaker audio output.

### ■ Connecting/ Disconnecting/ Deleting a registered device using My Devices

Press the button programmed as [Menu] to enter Bluetooth My Devices Mode using the Menu Mode.

#### To connect a device:

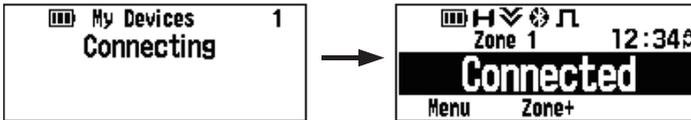
- 1 Press the [▲] and [▼] buttons to select the device to connect to.



- 2 Press the [□] or [\*] button to connect.



- 3 Press the [□] or [\*] button to confirm the connection.
  - The LED indicator blinks in blue while the transceiver is connecting to the device, "Connecting" appears on the display.
  - "Connected" appears when the connection is established.



### To disconnect a device:

- 1 Press the [▲] and [▼] buttons to select the device to disconnect.



- 2 Press the [□] or [\*] button to disconnect.



- 3 Press the [□] or [\*] button to confirm the disconnection.
  - The “✳” indicator and “Disconnected” appear on the display.



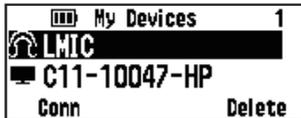
### To delete a device:

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#### Note:

- Make sure the device to be deleted has been disconnected.
- 

- 1 Press the [▲] and [▼] buttons to select the device to delete.



- 2 Press the [↵] or [#] button to delete.



- 3 Press the [□] or [\*] button to confirm.
  - The selected device will be deleted. “BT No Device” appears when there is no other registered device.



#### Note:

- To delete all the registered devices, press and hold the [↵] or [#] button in Step 2.
-

## ■ Checking the information of the devices

- 1 Press the button programmed as **[Menu]** to enter Bluetooth My Devices Mode using the Menu Mode.
- 2 Press the **[▲]** and **[▼]** buttons to select the device to display its information.



- 3 Press the **[▶]** button followed by the **[▲]** and **[▼]** buttons to switch between the different information displays as described below.
  - BT Name** : The name of the Bluetooth device.
  - BT Address** : The address of the Bluetooth device.
  - Class** : The equipment classification of the Bluetooth device. Refer to the following table for more details.
  - Heart Rate** : The heart rate [bpm] from a registered Bluetooth-enabled device that supports Heart Rate Service.
  - Injury Status** : Indicates whether or not a registered Bluetooth-enabled device that supports Automatic Injury Detection Service is damaged.
  - Charge** : The remaining battery power of a registered Bluetooth-enabled device that supports Battery Service.
  - Manufacturer** : The manufacturer's name of a registered Bluetooth-enabled device that supports Device Information Service.
  - Model** : The model number of a registered Bluetooth-enabled device that supports Device Information Service.
  - Serial** : The serial number of a registered Bluetooth-enabled device that supports Device Information Service.
  - Hardware Ver.** : The hardware version of a registered Bluetooth-enabled device that supports Device Information Service.
  - Firmware Ver.** : The firmware version of a registered Bluetooth-enabled device that supports Device Information Service.
  - Software Ver.** : The software version of a registered Bluetooth-enabled device that supports Device Information Service.

Device Class	Disconnected	Connected
Audio/Video		
Phone		
Computer		
LAN/Network		
Peripheral		
Imaging		
Wearable		
Toy		
Health		

**Note:**

- You can also check the information of the devices in the Find Device mode.
- The icons listed in the above table indicate the connection status of the Headset Profile, Heart Rate Service and Automatic Injury Detection Service. They are not applicable to the Serial Port Profile connection.

## ■ Switching the speaker audio output

You can switch the audio output between the speaker of the transceiver and the Bluetooth headset.

### Portable

Press the button programmed as **[Bluetooth Speaker]** to change the setting (“Off” or “Only”).

Alternatively, press the button programmed as **[Menu]** to enter Bluetooth Speaker Mode using the Menu Mode. Press the **[▲]** and **[▼]** buttons to select “Off” or “Only”.

**Off** : Audio is output from the built-in speaker of the transceiver.

**Only** : Audio is output from the speaker of the Bluetooth device.

Press the **[□]** button to confirm your selection.

### Mobile

Press the button programmed as **[Bluetooth Speaker]** repeatedly to change the setting (“Off”, “Only” or “Both(BT+Radio)”).

Alternatively, press the button programmed as **[Menu]** to enter Bluetooth Speaker Mode using the Menu Mode. Press the **[▲]** and **[▼]** buttons to select “Off”, “Only” or “Both(BT+Radio)”.

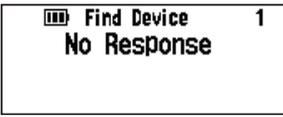
**Off** : Audio is output from the built-in speaker of the transceiver.

**Only** : Audio is output from the speaker of the Bluetooth device.

**Both(BT+Radio)** : Audio is output from both built-in speaker of the transceiver and speaker of the Bluetooth device.

Press the **[□]** button to confirm your selection.

# NOTIFICATION DISPLAY

Display	Cause
 <p>The notification shows a status bar with signal strength, Wi-Fi, and battery icons. Below the status bar, it says 'Zone 1' and '12:34'. The main message is 'BT Failure' in large white text on a black background. At the bottom, there are two buttons: 'Menu' and 'Zone+'.</p> <p>(Display for 1 second)</p>	<p>The integrated circuit (IC) which enables the Bluetooth function is not working properly.</p>
 <p>The notification shows 'Find Device' at the top, followed by 'BT Not Found' in large text. A 'Back' button is at the bottom.</p>	<p>No device is found in the Bluetooth Find Device Mode.</p>
 <p>The notification shows 'Find Device' at the top, followed by 'No Response' in large text and a '1' in the top right corner. A 'Back' button is at the bottom.</p> <p>(Display for 1 second)</p>	<p>There is no response from the Bluetooth device on the request for pairing, Headset Profile (HSP) connection, Serial Port Profile (SPP) connection or Bluetooth Low Energy (Heart Rate Service, Automatic Injury Detection Service) connection.</p>
 <p>The notification shows 'Find Device' at the top, followed by 'Connect Denied' in large text and a '1' in the top right corner. A 'Back' button is at the bottom.</p> <p>(Display for 1 second)</p>	<p>The Bluetooth device has rejected a request for pairing, Headset Profile (HSP) connection or Bluetooth Low Energy (Heart Rate Service, Automatic Injury Detection Service) connection.</p>
 <p>The notification shows 'Find Device' at the top, followed by 'BT No Service' in large text and a '1' in the top right corner. A 'Back' button is at the bottom.</p> <p>(Display for 1 second)</p>	<p>The Bluetooth device does not support Headset Profile (HSP) connection.</p>

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## BUILT-IN MEMORY

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Voice recordings recorded using Auto Recording and the GPS data received are stored in the built-in memory of this transceiver.

### Auto Recording

Auto Recording records and retains your last conversation, allowing you to catch what you may have missed hearing during the conversation.

If activated, the auto recording function will continuously record all transmitted and received signals to the built-in memory according to the maximum recording length set.

- The  indicator blinks while recording is in progress.

When recording is made to the built-in memory, the backup timing of the voice recording varies according to the First-in First-out Deletion setting. If First-in First-out Deletion is enabled, the recording is backed up when the transceiver is turned off using the **Power** switch. If disabled, the recording is backed up each time a recording is made. For details on the First-in First-out Deletion function, consult your dealer.

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#### Note:

- Recording stops when the maximum recording length is reached.
- New recordings cannot be made when the built-in memory is full. However, if the First-in First-out Deletion function is enabled, the oldest audio data will be deleted to make space for new recordings.
- If the First-in First-out Deletion function is enabled and recording is made to the built-in memory, the transceiver turns off without backing up the recording when it is turned off in the following situations:
  - When the battery runs out
  - When the battery pack is removed from the Portable transceiver
  - When the power cable is unplugged on the Mobile transceiver
- You can play back the voice recording in Playback mode, or delete the recording if necessary.
- If Auto Recording is used concurrently with the GPS Data Storage function, the beginning of the audio recorded by Auto Recording may be clipped off.

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### GPS Data Storage

The GPS data is stored temporarily in the transceiver RAM at every GPS Storage Interval from the GPS unit. The data will be written to the built-in memory when more than three pieces of data are collected. The stored GPS data in the built-in memory can be sent from the transceiver via DMR/ NXDN Air Protocol or can be read on a PC.

## Playback

You can play back the voice recordings recorded using Auto Recording.

- 1 Press the button programmed as **[Playback]** to enter Playback mode.  
Alternatively, press the button programmed as **[Menu]** to enter Playback mode using the Menu Mode.
  - The voice recordings are listed on the display.
- 2 Press the **[▲]** and **[▼]** buttons to move up and down the list.
- 3 Press the **[□]** or **[\*]** button to play back.
  - After playing back a recording, the transceiver will automatically play the next recording until the last recording on the list is played.
  - To pause or resume playback, press the **[□]** or **[\*]** button.
  - To skip to the next or previous recording, press the **[◀/▶]** button. Press and hold the button to fast-forward or rewind.

### ■ To play back the last recording directly

Press the button programmed as **[Playback (Last Recording)]** to play back the latest audio data recorded using the Auto Recording function.

### ■ To delete a recording

- 1 Press the **[↵]** or **[#]** button while the list is displayed.
  - A confirmation message appears on the display.
- 2 Press the **[□]** or **[\*]** button to delete.

### ■ To delete all recordings

- 1 Press and hold the **[↵]** or **[#]** button while the list is displayed.
  - A confirmation message appears on the display.
- 2 Press the **[□]** or **[\*]** button to delete.

## INDICATOR LIST

Indicator	Description
	Displays the signal strength.
	Displays the battery power.
	The channel is using high transmit power.
 (*1)	The channel is using medium transmit power.
	The channel is using low transmit power.
	In Digital mode (Digital Channel)
	In Analog mode (Analog Channel)
	In Digital mode (Mixed Channel)
	In Analog mode (Mixed Channel)
 (*2)	Connected to a Bluetooth device.
 (*2)	The Bluetooth function is activated. Blinks in the process of turning on Bluetooth.
 (*3)	The GPS position is determined. Blinks when the GPS is unable to determine the position.
	Scan, Priority Scan or Voting/ Site Roaming is in progress. Blinks when the scan is paused.
	Indicates Priority channel 1 or Priority Monitor ID 1.
	Indicates Priority channel 2 or Priority Monitor ID 2.
	Indicates Priority Monitor ID 3.
	Indicates Priority Monitor ID 4.
	The current channel is added to the scanning sequence.
	The current zone is added to the Multi-Zone scanning sequence.
	The Scrambler function is activated.
	The Encryption function is activated. Blinks when receiving an encrypted carrier.
	The Encryption (AES) function is activated. Blinks when receiving an encrypted carrier.
	The Encryption (DES) function is activated. Blinks when receiving an encrypted carrier.
	The Enhanced Encryption function is activated. Blinks when receiving an encrypted carrier.
	The Talk Around function is activated.
	The Monitor or Squelch Off function is activated.
	The External Speaker is activated.
 (*4)	The External Speaker (Internal + External) is activated.

Indicator	Description
	Blinks when an incoming call matches your Optional Signaling.
	The Vibrator function is activated. Blinks when the Vibrator is not functioning. (NX-3200/ NX-3300 only)
	A message is stored in the memory. Blinks when a new message is received.
	All stored Task Requests have been read. Blinks when a new Task Request is received and unread.
	The VOX function is activated.
	The Site Lock function is activated.
	The Broadcast Call function is activated.
	The Surveillance function is activated.
	The System Lock function is activated.
	Appears when the selected group is programmed as telephone IDs. Blinks during Auto Telephone search.
	The Tactical Zone is activated.
 (*4)	The Horn Alert function is activated.
 (*4)	The Public Address function is activated.
	The auxiliary function of a Portable transceiver (NX-3200/ NX-3300 only) or AUX A of a Mobile transceiver is activated.
 (*4)	AUX B is activated.
 (*4)	AUX C is activated.
	The Lone Worker function is activated.
	The OVCM function is activated.
	The Activity Detection function is activated.
	The Operator Selectable Tone function is activated.
	Blinks during Auto Recording.

\*1 Mobile:  
All models supported. (For K type)  
Not supported. (For E/C type)

Portable:  
All models supported.

\*2 Mobile:  
Supported models: NX-3720G, NX-3720HG, NX-3820G, NX-3820HG only.  
Portable:

Supported models: NX-3200, NX-3300 only. (For C type)  
All models supported. (For K/E type)

\*3 Mobile:  
Supported models: NX-3720HG, NX-3820HG only.

Portable:  
Supported models: NX-3200, NX-3300 only. (For C type)  
All models supported. (For K/E type)

\*4 For Mobile transceivers only

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