KENWOOD

INSTRUCTION MANUAL
MODE D'EMPLOI
MANUAL DE INSTRUCCIONES
BEDIENUNGSANLEITUNG
MANUAL DI ISTRUZIONI
GEBRUIKSAANWIJZING

TK-270G/ TK-370G

VHF FM TRANSCEIVER/
UHF FM TRANSCEIVER

EMETTEUR-RECEPTEUR FM VHF/
EMETTEUR-RECEPTEUR FM UHF

TRANSCEPTOR DE FM VHF/
TRANSCEPTOR DE FM UHF

VHF-FM-TRANSCEIVER/
UHF-FM-TRANSCEIVER

RICETRASMETTITORE FM VHF/
RICETRASMETTITORE FM UHF

VHF FM ZENDONTVANGER/
UHF FM ZENDONTVANGER

KENWOOD CORPORATION

© B62-1294-30 (E,NE,NT)
09 08 07 06 05 04 03

TK-270G/ TK-370G

ENGLISH

VHF FM TRANSCEIVER/
UHF FM TRANSCEIVER

INSTRUCTION MANUAL

THANK YOU

We are grateful you chose **KENWOOD** for your land mobile radio applications. We believe this easy-to-use transceiver will provide dependable communications to keep personnel operating at peak efficiency.

KENWOOD transceivers incorporate the latest in advanced technology. As a result, we feel strongly that you will be pleased with the quality and features of this product.

MODELS COVERED BY THIS MANUAL

- **TK-270G:** VHF FM Transceiver
- **TK-370G:** UHF FM Transceiver

NOTICES TO THE USER

- *GOVERNMENT LAW PROHIBITS THE OPERATION OF UNLICENSED RADIO TRANSMITTERS WITHIN THE TERRITORIES UNDER GOVERNMENT CONTROL.*
- *ILLEGAL OPERATION IS PUNISHABLE BY FINE OR IMPRISONMENT OR BOTH.*
- *REFER SERVICE TO QUALIFIED TECHNICIANS ONLY.*

SAFETY: It is important that the operator is aware of and understands hazards common to the operation of any transceiver.

WARNING:

EXPLOSIVE ATMOSPHERES (GASES, DUST, FUMES, etc.)

Turn off your transceiver while taking on fuel, or while parked in gasoline service stations.

PRECAUTIONS

Observe the following precautions to prevent fire, personal injury, and transceiver damage.

- Do not modify this transceiver for any reason.
- Do not expose the transceiver to long periods of direct sunlight, nor place it close to heating appliances.
- Do not place the transceiver in excessively dusty, humid, and/or wet areas, nor on unstable surfaces.
- If an abnormal odor or smoke is detected coming from the transceiver, switch OFF the power immediately and remove the optional battery pack from the transceiver. Contact your **KENWOOD** dealer.

CONTENTS

UNPACKING AND CHECKING EQUIPMENT 1
- Supplied Accessories 1

PREPARATION 3
- Charging the Optional NiCd Battery Pack 3
- Installing/ Removing the Optional NiCd Battery Pack 3
- Installing the Antenna 4
- Installing the Belt Clip 5
- Installing the Cap over the Speaker/ Microphone Jacks 5
- Installing the Optional Speaker/ Microphone 5

GETTING ACQUAINTED 6
- Display 8

PROGRAMMABLE AUXILIARY FUNCTIONS 9

OPERATING BASICS 10
- Switching Power ON/OFF 10
- Adjusting the Volume 10
- Selecting a Group or Channel 10
- Adjusting the Squelch Level 11
- Placing a Call 12
- Receiving a Call 12

CHANNEL SCAN 13
- Priority Scan 14
- Channel Lockout 14
- Revert Channel 14

DTMF CALLS 15
- Manual Dialling 15

Storing DTMF Numbers 16
Confirming Stored DTMF Numbers 16
Dialling Stored DTMF Numbers 17
Clearing Stored DTMF Numbers 17
Redialling 17
CODE SQUELCH 18
Receiving 18
Transmitting 19
SELECTIVE CALL 20
Receiving 21
Transmitting 22
2-TONE SIGNALLING 23
Receiving 23
Transmitting 24
5-TONE SIGNALLING 25
AUXILIARY FUNCTIONS 26
Selecting an Output Power 26
Time-out Timer (TOT) 26
Busy Channel Lockout (BCL) 27
Talk-Around 27
Battery Voltage Level 28
Lamp 28
Beginning/ End of Transmission Signal 28
Monitor/Squelch 29

UNPACKING AND CHECKING EQUIPMENT

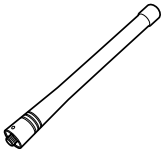
Note: *The following unpacking instructions are for use by your* ***KENWOOD*** *dealer, an authorized* ***KENWOOD*** *service facility, or the factory.*

Carefully unpack the transceiver. We recommend that you identify the items listed in the following table before discarding the packing material. If any items are missing or have been damaged during shipment, file a claim with the carrier immediately.

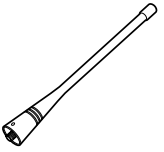
■ Supplied Accessories

Item		Part number	Quantity
Antenna	TK-270G (E,NE)	T90-0695-X5	1
	TK-270G (NT)	T90-0680-X5	
	TK-370G (E,NE)	T90-0682-X5	
Belt clip		J29-0624-X3	1
Screw set		N99-2012-X5	1
Speaker/ microphone jacks cap		B09-0351-X3	1
Speaker/ microphone locking bracket		J21-4493-X4	1
Instruction manual		B62-1294-XX	1

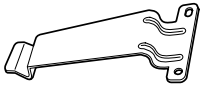
Note: *A market code (E, NE, or NT) can be found on the label attached to the package box.*



Antenna (TK-270G)



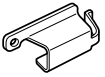
Antenna (TK-370G)



Belt clip

Screw set

Speaker/ microphone jacks cap



Speaker/ microphone locking bracket

■ Charging the Optional NiCd Battery Pack

The optional battery pack is not charged at the factory; charge it before use (refer to the battery pack instruction manual).

CAUTION

- *DO NOT RECHARGE THE BATTERY PACK IF IT IS ALREADY FULLY CHARGED. DOING SO MAY CAUSE THE LIFE OF THE BATTERY PACK TO SHORTEN OR THE BATTERY PACK MAY BE DAMAGED.*
- *AFTER RECHARGING THE BATTERY PACK, DISCONNECT IT FROM THE CHARGER. IF THE CHARGER POWER IS RESET (TURNED ON AFTER BEING TURNED OFF), RECHARGING WILL START AGAIN AND THE BATTERY PACK WILL BECOME OVERCHARGED.*

Initially charging the battery pack after purchase or extended storage (greater than 2 months) will not bring the battery pack to its normal operating capacity. After repeating the charge/discharge cycle two or three times, the operating capacity will increase to normal.

■ Installing/ Removing the Optional NiCd Battery Pack

Only use the KNB-14 and KNB-15A battery packs with this transceiver.

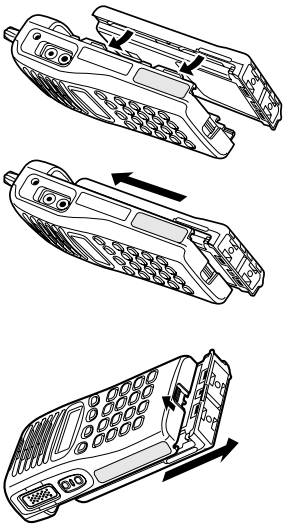
CAUTION

- *DO NOT SHORT THE BATTERY TERMINALS OR DISPOSE OF THE BATTERY BY FIRE.*
- *NEVER ATTEMPT TO REMOVE THE CASING FROM THE BATTERY PACK.*

1 Match the four grooves of the battery pack with the corresponding guides on the back of the transceiver.

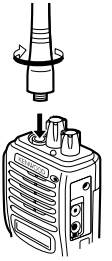
2 Slide the battery pack along the back of the transceiver until the release latch on the base of the transceiver locks.

3 To remove the battery pack, pull back on the release latch and slide the pack away from the transceiver.



■ Installing the Antenna

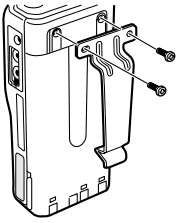
Screw the antenna into the connector on the top of the transceiver by holding the antenna at its base and turning it clockwise until secure.



■ Installing the Belt Clip

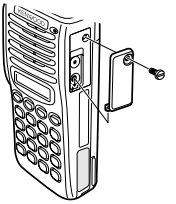
If necessary, attach the belt clip using the two supplied 3 x 8 mm screws.

Note: *If the belt clip is not installed, its mounting location may get hot during continuous transmission or when left sitting in a hot environment.*



■ Installing the Cap over the Speaker/ Microphone Jacks

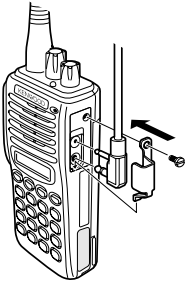
If you are not using an optional speaker/ microphone, install the cover over the **SP**/**MIC** jacks using the supplied 3 x 6 mm screw.

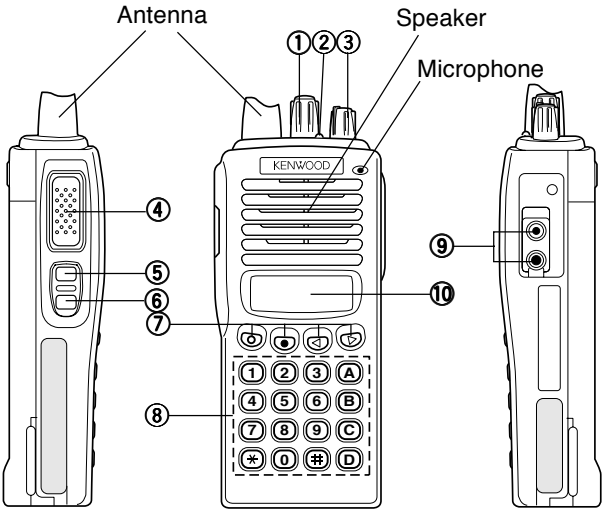


■ Installing the Optional Speaker/ Microphone

1 Insert the speaker/ microphone plugs into the **SP**/**MIC** jacks.

2 Install the speaker/ microphone locking bracket over the plugs using the supplied 3 x 6 mm screw.





The transceiver is shown with the optional KNB-14 battery pack.

① Rotary encoder

Your dealer can program the encoder as either Group Up/Down or Channel Up/Down (default setting). Rotate to select a group or channel. Also rotate to adjust the squelch in Squelch Adjustment mode.

② LED indicator

Lights red while transmitting. Lights green while receiving. Flashes orange while receiving a Code Squelch or Selective Call code, or a 2-Tone, 5-Tone, or DTMF signal that matches the one set up in your transceiver. Flashes red when the battery power is low while transmitting.

③ **Power switch/ Volume control**
Turn clockwise to switch ON the transceiver. Rotate to adjust the volume. To switch OFF the transceiver, turn counterclockwise fully.

④ **PTT (Push-to-Talk) switch**
Press this switch, then speak into the microphone to call a station.

⑤ **Side 1 key**
This is a PF (Programmable Function) key. Press it to activate its auxiliary function {page 9}.

⑥ **Side 2 key**
This is a PF (Programmable Function) key. Press it to activate its auxiliary function {page 9}.

⑦ **O, ●, ◀, ▶ keys**
These are PF (Programmable Function) keys. Press each key to activate its auxiliary function {page 9}.

⑧ **DTMF keypad**
Used for storing and transmitting DTMF numbers.

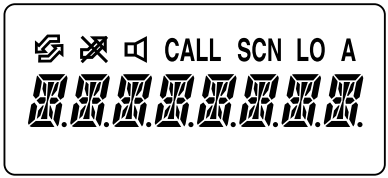
⑨ **SP/MIC jacks**
Connect an optional speaker/ microphone here.

⑩ **Display**
(See page 8.)

Note: *The PF keys are programmed with default functions:*

- ***Side 1 key:*** *Lamp*
- ***Side 2 key:*** *Monitor A*
- **O *key:*** *Scan*
- **●** ***key:*** *Scan Del/Add*
- **◀** ***key:*** *Talk Around*
- **▶** ***key:*** *RF Power Lo*

■ Display



Icon	Description
	Not used on this transceiver.
	Appears when the selected channel is busy.
	Appears when QT, DQT, DTMF, 2-Tone, or 5-Tone decoding is deactivated (by pressing the **Monitor** key).
CALL	Appears when you receive a Code Squelch, Selective Call, 2-Tone, 5-Tone, or DTMF Signalling call. Also appears when you transmit using Code Squelch or Selective Call.
SCN	Appears while scanning.
LO	Appears while using low power on the selected channel.
A	Appears when the selected channel is included in the scanning sequence.
	Displays the selected channel, the squelch level, DTMF digits (when entering digits, confirming digits, or making a call), and messages received via Selective Call.

PROGRAMMABLE AUXILIARY FUNCTIONS

Side 1, **Side 2**, **O**, **●**, **◀**, and **▶** can be programmed with the auxiliary functions listed below.

Function	DTMF/ 2-Tone Model	5-Tone Model
Call 1	No	Yes
Call 2	No	Yes
Channel Down	Yes	Yes
Channel Up	Yes	Yes
Display Character	Yes	Yes
Group Down	Yes	Yes
Group Up	Yes	Yes
Home Channel	Yes	Yes
Key Lock	Yes	Yes
Lamp	Yes	Yes
Monitor	Yes	Yes
Monitor Momentary	Yes	Yes
None	Yes	Yes
Redial	Yes	No
RF Power Lo	Yes	Yes
Scan	Yes	Yes
Scan Del/Add	Yes	Yes
Sel Call Entry	No	Yes
Squelch Momentary	Yes	Yes
Squelch Off	Yes	Yes
Talk-Around	Yes	Yes
2-Tone Encode	Yes	No

■ Switching Power ON/OFF

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

Turn the **Power** switch/ **Volume** control counter-clockwise to switch the transceiver OFF.

If the Radio Password function is programmed, "PASSWORD" will appear on the display when the power is turned ON. To unlock the transceiver, enter the password, then press the **O** key. If you enter the wrong password, an error tone sounds and the transceiver remains locked. The password can contain a maximum of 6 digits.

■ Adjusting the Volume

Rotate the **Power** switch/ **Volume** control to adjust the volume. Clockwise increases the volume and counterclockwise decreases it.

- You may need to adjust the volume more precisely while communicating with other parties.

Note: *If your dealer programmed* ***Squelch Momentary*** *or* ***Squelch Off*** *onto a PF key, you can press that key to hear background noise while adjusting the volume level (refer to "Monitor/Squelch" on page 29).*

■ Selecting a Group or Channel

Rotate the **Rotary encoder** (or press the keys programmed as **Group Up**/**Down** or **Channel Up**/ **Down**) to choose your desired group or channel. Clockwise increases the number and counter-clockwise decreases it.

- If a group or channel has not been programmed, it cannot be used.

■ Adjusting the Squelch Level

Squelch is used to silence the speaker when no signals are present. When squelch is turned OFF, you will hear background noise from the speaker. When it is ON, you will not hear background noise.

The squelch level you select determines when squelch will turn OFF and ON. If you select a squelch level that is too high, you will not hear weaker signals. If you select a squelch level that is too low, you will hear background noise between signals.

To adjust the squelch:

1 Press and hold the **Side 2** key, then press the ▶ key.

- "SQL" and the current squelch level appear.

2 Rotate the **Rotary encoder** to select a squelch level from 0 ~ 9.

- Clockwise increases the squelch level and counterclockwise decreases it.

3 Press any key other than the key programmed as **Lamp** to complete the setting.

- Normal operation is restored.

■ Placing a Call

1 Make sure no parties are currently transmitting on your selected channel.

2 Press the **PTT** switch and speak into the microphone in your normal speaking voice.

- For best sound quality at the receiving station, hold the microphone approximately 1.5 inches (3 ~ 4 cm) from your mouth.

3 Release the **PTT** switch to receive.

■ Receiving a Call

Your dealer may have programmed QT or DQT signalling on your transceiver. If your selected channel is programmed with one of these features, you will hear calls only when another party in your system makes a call. All other calls will not be heard.

If your selected channel is not set up with QT or DQT, you will hear calls made by any party (not just those in your system).

CHANNEL SCAN

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

The transceiver will remain on a busy channel until the signal is no longer present. Your dealer programs the delay time between signal drop-out and scan resumption. If a signal is received during the delay time, the transceiver will remain on the same channel.

Note:

- *You can only use Scan if your dealer has programmed at least 2 channels on the transceiver. Also, there must be at least 2 channels not locked out of Scan.*
- *Ask your dealer for an explanation on how Channel Scan functions when using Code Squelch, Selective Call, or 2-Tone signalling.*

To start scanning, press the key programmed as **Scan**.

- Scanning starts from the current channel and ascends through the channel numbers.
- The SCN icon and “SCAN” appear on the display.

To end Scan, press the **Scan** key again.

■ Priority Scan

If your dealer set up a priority channel on your transceiver, the transceiver will continuously monitor that channel while receiving a signal on another channel. When a signal is received on the Priority channel, the transceiver immediately switches to that channel.

- "P" appears on the display.

The transceiver will remain on the Priority channel until the signal drops out. Your dealer programs the delay time between signal drop-out and scan resumption.

■ Channel Lockout

If programmed by your dealer, you can select channels to lock out of the scanning sequence. Perform the following steps while not in Scan mode.

1 Rotate the **Rotary encoder** to select the channel you want to lock out of Scan.

2 Press the key programmed as **Scan Del/Add**.

- Each press of **Scan Del/Add** toggles the lockout status of the selected channel ON and OFF.
- Channels that are included in Scan are represented by an "A" on the display. Channels locked out of Scan do not have an "A" on the display.

■ Revert Channel

During Scan, pressing the **PTT** switch to transmit will cause the transceiver to select the revert channel. Your dealer programs the Revert channel for your transceiver. Consult your dealer for details.

■ Manual Dialling

There are two ways to manually call a number:

1) Press and hold the **PTT** switch, then enter the desired digits on the keypad.

- You can enter the digits **0** ~ **9**, **A** ~ **D**, ✱ , and **#**. (**A** ~ **D** may be disabled by your dealer.)
- If programmed by your dealer, you do not need to continuously hold the **PTT** switch. The transceiver will remain in the transmit state for 2 seconds after releasing each key.
- While transmitting DTMF tones, the microphone is muted. You can monitor tones as they are transmitted by listening to the speaker audio.

2) First enter the desired digits on the keypad (16 digits maximum).

- Each digit appears on the display as it is entered and its corresponding DTMF tone sounds.
- You can enter the digits **0** ~ **9**, **A** ~ **D**, ✱ , and **#**. (**A** ~ **D** may be disabled by your dealer, however you can still enter them if desired.)
- If you entered a wrong digit or decide not to dial the number, press the **O,** ●**,** ◀**,** or ▶ key to exit.

After entering the desired digits, press the **PTT** switch to make the call.

- The digits scroll across the display and their corresponding DTMF tone sounds.
- If programmed by your dealer, no DTMF tone will sound when “D” is transmitted. “D” is used for a pause time. The pause duration is programmed by your dealer.

■ Storing DTMF Numbers

Note: *Auto Dialling must first be activated by your dealer.*

You can store DTMF numbers (16 digits maximum) in each of the 9 Auto Dial memory locations (1 ~ 9).

1 Press the **#** key.

- "D" appears on the display.

2 Enter the desired digits on the keypad.

- You can enter the digits **0** ~ **9**, **A** ~ **D**, ✱ , and **#**. (**A** ~ **D** may be disabled by your dealer, however you can still enter them if desired.) When entering "**#**", you must first press the **PTT** switch.
- To cancel, press **O**, ●, ◀, or ▶.

3 Press the **#** key, then enter a single digit number (1 ~ 9) for the memory location.

- The original display is restored.

■ Confirming Stored DTMF Numbers

To confirm the numbers stored in memory locations:

1 Press the ✱ key.

- "A" appears on the display.

2 Enter the desired memory location number (1 ~ 9).

- The stored digits are displayed.
- If programmed by your dealer, no DTMF tone will sound when "D" is transmitted. "D" is used for a pause time. The pause duration is programmed by your dealer.

3 Press any key other than the **PTT** switch to exit.

■ Dialling Stored DTMF Numbers

To call a number stored in a memory location:

1 Press the ✳ key.

- "A" appears on the display.

2 Enter the desired memory location number (1 ~ 9).

- The stored digits are displayed.

3 Press the **PTT** switch.

- If programmed by your dealer, no DTMF tone will sound when "D" is transmitted. "D" is used for a pause time. The pause duration is programmed by your dealer.

■ Clearing Stored DTMF Numbers

To clear the numbers from a memory location:

1 Press the **#** key twice.

- "D- CLR" appears on the display.
- To cancel the process, press any key other than **1** ~ **9**.

2 Enter the desired memory location number (1 ~ 9).

■ Redialling

You can redial the last number you transmitted (16 digits maximum).

1 Press the ✳ key, then press the **0** key.

- "A" and the digits are displayed.

2 Press the **PTT** switch.

Note: *Switching OFF the transceiver power clears the redial memory.*

CODE SQUELCH

Code Squelch is enabled or disabled by your dealer. This function turns the transceiver squelch OFF only when it receives the DTMF code that has been set up in your transceiver. Transceivers that do not transmit the correct code will not be heard. Consequently, you can communicate with a specific party without listening to other parties using the same channel.

Your dealer may also activate Group Call for your transceiver. This is useful when you want to send information to a number of units in a fleet. Ask your dealer for details.

Note: *Code Squelch cannot be used on channels programmed with Selective Call or 2-Tone Signalling.*

■ Receiving

When you receive a signal containing the correct code, squelch turns OFF and you will hear the call.

- "CALL" appears on the display and the LED indicator flashes orange.
- To mute the speaker after squelch turns OFF, press the key programmed as **Monitor** or **Squelch**.
- Your dealer can program squelch to automatically turn back ON after a specific time period elapses.
- If Transpond for Code Squelch is programmed, an acknowledgment signal is returned to the calling station. Transpond does not function when you are called with a Group code. Transpond for Code Squelch can send an alert tone, a transceiver ID code, or a code stored in memory location 1.
- If Tone Alert for Code Squelch is programmed, an alert tone will sound when the correct code is received.

■ Transmitting

1 Press and hold the **PTT** switch.

2 Enter the code of the transceiver you want to call or enter a Group code on the keypad.

- If desired, you can send codes the same way you make DTMF calls {page 15}. Both manual methods can be used or you can store codes in memory, then dial them from a memory location.
- "CALL" appears on the display and the LED indicator lights red.

3 Use the transceiver the same as in a regular call; press the **PTT** switch to transmit and release it to receive.

- The called transceiver's squelch will turn OFF while you are transmitting. After you stop transmitting, the squelch will turn back ON after a pre-set time period elapses. This time period is programmed by your dealer.
- When you release the **PTT** switch, squelch turns OFF and the LED indicator flashes orange. When you receive a signal, the LED indicator lights green. When the signal drops out, the LED indicator flashes orange again. If no signal is received for a pre-determined time, squelch turns back ON.
- Pressing the key programmed as **Monitor** or **Squelch** at any time will turn the squelch back ON.

SELECTIVE CALL

Selective Call is enabled or disabled by your dealer. This function is similar to Code Squelch {page 18}. The differences from Code Squelch are:

- You can send or receive message codes containing a maximum of 5 digits.
- Selective Call turns the squelch OFF only when the transceiver receives a predetermined DTMF code in the correct sequence:
  1) A 3-digit ID code
  2) A 1-digit Intermediate code
  3) A message code (up to 5 digits)

Your dealer may also activate Group Call for your transceiver. This is useful when you want to pass information to a number of units in a fleet. Ask your dealer for details.

Note: *Selective Call cannot be used on channels programmed with Code Squelch or 2-Tone Signalling.*

■ Receiving

When you receive the correct ID and Intermediate codes, squelch turns OFF and you will hear the call. If a message code is also received, the message appears on the display

- "CALL" appears on the display and the LED indicator flashes orange.
- When you receive a call with your ID code, "C" appears on the display (i.e.- C 12345).
- When you receive a call with your Group code, "A" appears on the display (i.e.- A 12345).
- When no message is received, "NO DATA" appears on the display.
- You can clear a message by pressing any key other than the key programmed as **Lamp**.
- To mute the speaker after squelch turns OFF, press the key programmed as **Monitor** or **Squelch**.
- Your dealer can program squelch to automatically turn back ON after a specific time period elapses.
- If Transpond for Selective Call is programmed, an acknowledgment signal is returned to the calling station. Transpond does not function when you are called with a Group code. Transpond for Selective Call can send an alert tone, a transceiver ID code, or a code stored in memory location 1.
- If Tone Alert for Selective Call is programmed, an alert tone will sound when the correct code is received.

■ Transmitting

1 Press and hold the **PTT** switch.

2 Enter the code of the transceiver you want to call or enter a Group code on the keypad.

- Be sure to enter the ID or Group code, followed by the Intermediate code of the transceiver you want to call. If desired, you can also enter a message code of up to 5 digits.
- If desired, you can send codes the same way you make DTMF calls {page 15}. Both manual methods can be used or you can store codes in memory, then dial them from a memory location.
- "CALL" appears on the display and the LED indicator lights red.

3 Use the transceiver the same as in a regular call; press the **PTT** switch to transmit and release it to receive.

- When you release the **PTT** switch, squelch turns OFF and the LED indicator flashes orange. When you receive a signal, the LED indicator lights green. When the signal drops out, the LED indicator flashes orange again. If no signal is received for a pre-determined time, squelch turns back ON.
- Pressing the key programmed as **Monitor** or **Squelch** at any time will turn the squelch back ON.

2-TONE SIGNALLING

2-Tone Signalling is enabled or disabled by your dealer. This function turns the transceiver optional signalling OFF only when it receives the 2-tone signal that has been set up in your transceiver. Transceivers that do not transmit the correct tones will not be heard.

Your dealer may also activate Group Call for your transceiver. Ask your dealer for details.

■ Receiving

When you receive a signal containing the correct tones, optional signalling turns OFF and you will hear the call.

- "CALL" appears on the display and the LED indicator flashes orange.
- If your dealer has programmed the transceiver to turn the squelch OFF, you can mute the speaker by pressing the key programmed as **Monitor** or **Squelch**.
- Your dealer can program optional signalling and squelch to automatically turn back ON after a specific time period elapses.
- If Transpond for 2-Tone Signalling is programmed, an acknowledgment signal is returned to the calling station. Transpond for 2-Tone Signalling can transmit an alert tone only.
- If Tone Alert for 2-Tone Signalling is programmed, an alert tone will sound when the correct tones are received.

■ Transmitting

1 Press the key programmed as **2-Tone Encode**.

- A 2-Tone code appears on the display.

2 Rotate the **Rotary encoder** to select your desired 2-Tone code.

3 Press the **PTT** switch and **2-Tone Encode** key to begin transmitting. Release the **2-Tone Encode** key when transmission has started. Release the **PTT** switch to receive.

- When you release the **PTT** switch, optional signalling turns OFF and the LED indicator flashes orange. When you receive a signal, the LED indicator alternates between green and orange. When the signal drops out, the LED indicator flashes orange again. If no signal is received for a pre-determined time, optional signalling turns back ON.
- Pressing the key programmed as **Monitor** or **Squelch** at any time will turn the optional signalling back ON.

5-TONE SIGNALLING

5-Tone Signalling is either activated or deactivated by your dealer.

5-Tone Signalling only opens the squelch when the transceiver receives five tones corresponding to those set up in your transceiver. When the squelch opens, you will be able to hear the caller without any further action.

After a correct 5-Tone signal is received and the squelch opens, pressing the key programmed as **Monitor** will cancel the connection.

If your dealer programmed Transpond for 5-Tone Signalling, your transceiver will automatically send an acknowledgment signal to stations that called you with the correct signal.

Note: *This transceiver is also capable of decoding 2-Tone signals. However, you cannot make 2-Tone calls unless 2-Tone Signalling has been activated by your dealer.*

■ Selecting an Output Power

Each channel is programmed with either high or low output power by your dealer. You can change the output power of only channels programmed as high.

When you can reliably communicate with other parties without using high power, select low power by pressing the key programmed as **RF Power Lo**. Each time you press **RF Power Lo**, the output power toggles between high and low.

- Using low power conserves battery power and reduces the risk of interfering with other communications.
- The “LO” icon appears when you are using low power.

Note:

- *Pressing **RF Power Lo** while using a channel programmed with low power causes an error tone to sound.*
- *When changing a channel from high power to low power, all channels programmed with high power are changed to low.*

■ Time-out Timer (TOT)

The purpose of the Time-out Timer is 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 a warning function to alert you before the TOT expires. Continuously transmitting for the time specified by your dealer will cause the warning tone to sound.

■ Busy Channel Lockout (BCL)

The Busy Channel Lockout feature is activated or deactivated by your dealer.

When activated, BCL prevents you from interfering with other parties who may be using the same channel that you selected. Pressing the **PTT** switch while the channel is in use will cause your transceiver to emit an alert tone and transmission will be inhibited (you cannot transmit). Release the **PTT** switch to stop the tone and return to receive mode.

■ Talk-Around

You may occasionally experience an interruption in service (due to a power failure, etc.). During such an occurence, you can continue communication by using the Talk-Around feature, if it has been programmed by your dealer. Talk-Around allows you to communicate directly with other transceivers, without the use of a repeater. However, if the station you want to contact is too far away, or there are geographical obstacles in the way, you may not be able to contact the station.

Toggle Talk-Around ON and OFF by pressing the key programmed as **Talk-Around**.

- "T" or "TA" appears on the display while Talk-Around is active.
- When using Talk-Around, the "receive" frequency is used for both transmission and reception, and the QT/DQT "decode" signalling is used for both encoding and decoding.

■ Battery Voltage Level

While transmitting, the transceiver automatically checks the battery voltage level. When the voltage level becomes low, the LED indicator flashes red. When a tone sounds, transmission stops. Recharge or replace the battery pack at this time.

■ Lamp

Press the key programmed as **Lamp** to toggle the display backlight ON or OFF. The backlight automatically turns OFF approximately 5 seconds after it is switched ON.

Press any key other than **Lamp** while the backlight is ON to reset the 5 second timer. The timer will reset and the backlight will remain on for 5 seconds.

■ Beginning/ End of Transmission Signal

Your dealer can enable or disable the Beginning/ End of Transmission identification signals. These signals are used to access and release some repeaters and telephone systems.

To send a Beginning of Transmission signal, either press the **PTT** switch, or press the ✱ key two times.

To send an End of Transmission signal, either release the **PTT** switch or press the ✱ key followed by the **#** key.

- Ask your dealer which method has been activated on your transceiver.

■ Monitor/Squelch

Your dealer can program a key with the Monitor or Squelch function one of four ways:

Squelch Momentary: Press and hold the **Squelch** key to hear background noise. Release the key to return to normal operation.

Squelch Off: Momentarily press the **Squelch** key to hear background noise. Press the key again to return to normal operation.

Monitor Momentary: Press and hold the **Monitor** key to deactivate QT, DQT, DTMF, 2-Tone, or 5-Tone signalling. Release the key to return to normal operation.

Monitor: Momentarily press the **Monitor** key to deactivate QT, DQT, DTMF, 2-Tone, or 5-Tone signalling. Press the key again to return to normal operation.

You can use the **Squelch** key to listen to weak signals that you cannot hear during normal operation and to adjust the volume when no signals are present on your selected channel.