KENWOOD

TK-270/TK-370
TK-278/TK-378

VHF FM TRANSCEIVER/
UHF FM TRANSCEIVER

INSTRUCTION MANUAL

TRANSCEPTOR DE FM VHF/
TRANSCEPTOR DE FM UHF

MANUAL DE INSTRUCCIONES

VHF手持式调频通信机/
UHF手持式调频通信机

使用说明书

KENWOOD CORPORATION

©B62-0628-20(K,M)
09 08 07 06 05 04 03 02

TK-270/TK-370
TK-278/TK-378

VHF FM TRANSCEIVER/
UHF FM TRANSCEIVER

INSTRUCTION MANUAL

ENGLISH

MODELS COVERED BY THIS MANUAL

- **TK-270**: VHF FM Transceiver
- **TK-370**: UHF FM Transceiver
- **TK-278**: VHF FM Transceiver
- **TK-378**: UHF FM Transceiver

NOTICES TO THE USER

WARNING:

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 A QUALIFIED LICENSED OR CERTIFIED TECHNICIAN 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 and do not operate your transceiver while taking on fuel, or while parked in gasoline service stations.

One or more of the following statements may be applicable:

FCC WARNING

This equipment generates or uses radio frequency energy. Changes or modifications to this equipment may cause harmful interference unless the modifications are expressly approved in the instruction manual. The user could lose the authority to operate this equipment if an unauthorized change or modification is made.

INFORMATION TO THE DIGITAL DEVICE USER REQUIRED BY THE FCC

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can generate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- *Reorient or relocate the receiving antenna.*
- *Increase the separation between the equipment and receiver.*
- *Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.*
- *Consult the dealer for technical assistance.*

ATTENTION (U.S.A. only):

Nickel-cadmium batteries must be recycled or disposed of properly. State laws vary regarding the handling and disposal of nickel-cadmium batteries.

*Please contact your authorized **KENWOOD** dealer for more information.*

PRECAUTIONS

Please 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 the transceiver close to heating appliances.
- Do not place the transceiver in excessively dusty areas, humid 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.

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THANK YOU!

We are grateful you chose **KENWOOD** for your land mobile 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 this product's quality and features.

UNPACKING AND CHECKING EQUIPMENT

Note: *The following 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 on the following page before discarding the packing material. If any damage has occurred during shipment, file a claim with the carrier immediately.

■ Supplied Accessories

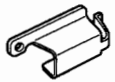
Item	Part Number	Qty.
Antenna		
• TK-270 K	T90-0450-XX	1
• TK-270 K2	T90-0381-XX	1
• TK-370 K, K2, K3	T90-0380-XX	1
• TK-370 K4	T90-0448-XX	1
• TK-278 M	T90-0616-XX	1
• TK-278 M2	T90-0615-XX	1
• TK-378 M	T90-0609-XX	1
• TK-378 M4	T90-0608-XX	1
• TK-378 M6	T90-0629-XX	1
Belt hook	J29-0624-XX	1
Screw set	N99-0396-XX	1
Speaker-mic jacks cap	B09-0351-XX	1
Locking bracket (for speaker-mic)	J21-4493-XX	1
Warranty card (U.S.A. and Canada only)	–	1
Instruction manual	B62-0628-XX	1

Note: *Antennas are provided in some markets only.*

Belt hook

Speaker-mic jacks cap

Screw set



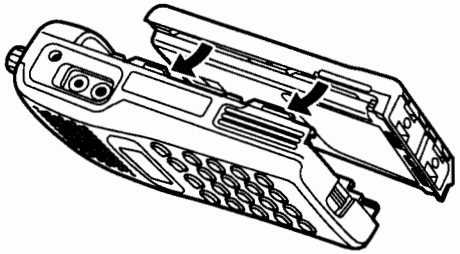
Locking bracket

PREPARATION

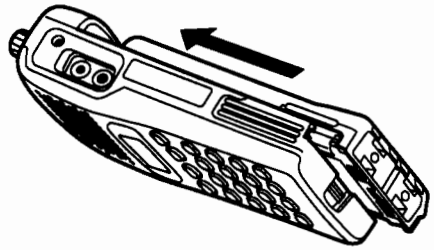
INSTALLING/REMOVING THE OPTIONAL BATTERY PACK

The optional KNB-14 or KNB-15A battery pack is not charged at the factory. Charge the pack before use. If after purchase or extended storage (greater than 2 months), battery capacity is found to be low, the battery pack needs recharging. Repeating the charge/discharge cycles two or three times will restore the battery to its normal capacity.

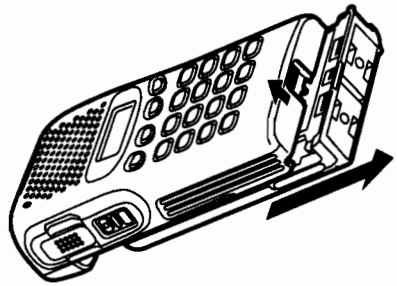
1 Position the four grooves on the inside edges of the battery pack over the corresponding guides on the back of the transceiver.



2 Slide the battery pack along the back of the transceiver until the release catch on the base of the transceiver locks the battery pack in place.



3 To remove the battery pack, grasp the pack near its tabs, pull back on the release catch, then slide the pack away from the transceiver.



CAUTION:

- *Do not recharge the battery pack if it is already fully charged. If you do this, you will overcharge the battery pack which may shorten its life or damage it.*
- *After recharging the battery pack, disconnect it from the charger. If, having recharged the battery pack, the power to the charger is turned off and then back on while the pack is still connected, recharging will start again and the battery pack will become overcharged.*
- *Do not short the battery pack terminals or dispose of the battery by fire. Never attempt to remove the case from the battery pack.*

INSTALLING THE ANTENNA

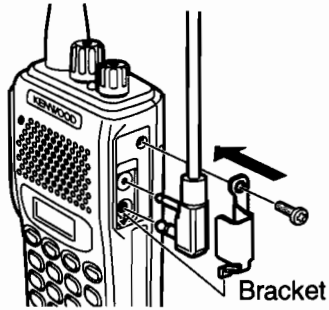
Holding the provided antenna at its base, screw the antenna into the connector on the top panel of the transceiver.

INSTALLING THE CAP OVER THE SPEAKER-MIC JACKS

Use the supplied screw (3 mm x 6 mm) to install the cap over the speaker-mic jacks if a speaker-microphone is not used.

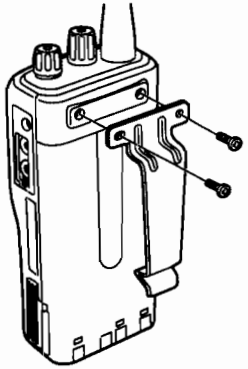
INSTALLING THE SPEAKER-MICROPHONE

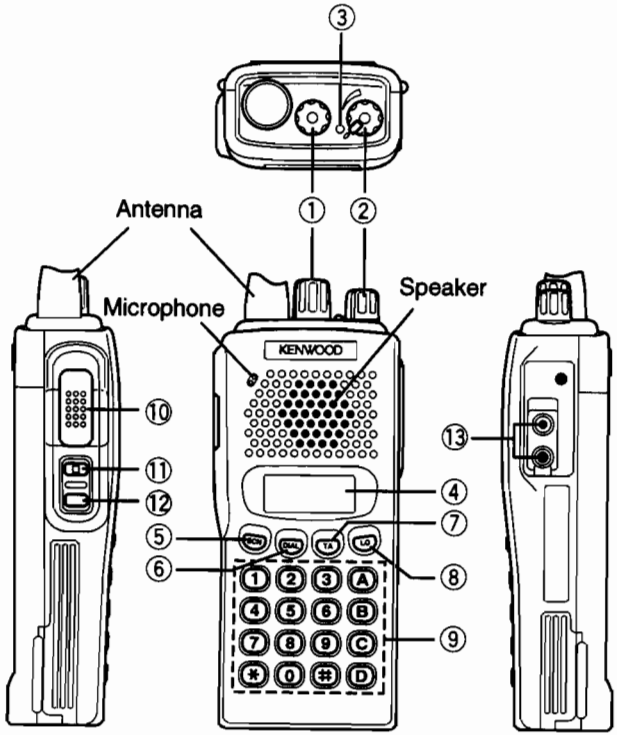
Insert the speaker-microphone plugs into the **SP/MIC** jacks. Attach the locking bracket using the supplied screw (3 mm x 6 mm).



INSTALLING THE BELT HOOK

If necessary, attach the belt hook using the two 3 mm x 8 mm screws from the supplied screw set.





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

① CHANNEL selector

Selects operating channels. Also used for selecting squelch level. If so programmed by your dealer, used for selecting channels to be locked out, or for selecting the QT frequencies so they may be changed.

② POWER/VOL control

Switches the transceiver ON or OFF. Also increases or decreases the transceiver volume.

③ LED indicator

Lights red while transmitting. Flashes red when the battery voltage level is low. Lights green when receiving a station. Flashes orange when receiving the correct signaling for Code Squelch, Selective Call, or 2-Tone (2-Tone: TK- 270/TK-370 only).

④ Display (see page 12)

⑤ SCN key

Used for controlling the Scan function.

⑥ DIAL key

Used for dialing a number with the Store and Send function, or used for storing, confirming, transmitting, or erasing numbers with the Auto-dial function.

⑦ TA key

Toggles the Talk-around function or the Reverse function ON or OFF.

⑧ LO key

Used for setting the transmit power.

⑨ DTMF keypad

Used for storing or transmitting DTMF numbers.

⑩ PTT (Push-to-Talk) switch

Switches the transceiver between receive and transmit modes.

⑪ LAMP button

Toggles the Display illumination ON or OFF. The Display light goes OFF approximately 5 seconds after being switched ON.

Pressing any button or key except the **LAMP** button while the Display is illuminated restarts the 5 second timer. However, pressing the **LAMP** button switches OFF the light immediately.

⑫ MONI button

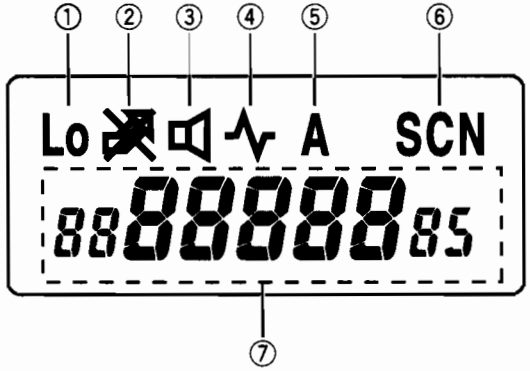
Press to monitor activity on your selected channel. Also used with QT, DQT, DTMF, or 2-Tone signaling to mute the speaker after these functions have opened squelch (DQT and 2-Tone: TK-270/TK-370 only).

JACKS

⑬ Speaker-Microphone jacks

If desired, connect a speaker-microphone here.

DISPLAY



① Lo

Appears when the Low Power function is selected.

②

Appears when the selected channel is busy.

③

Appears when QT, DQT, DTMF, or 2-Tone decoding is deactivated by pressing the **MONI** button (DQT and 2-Tone: TK-270/TK-370 only).

④

Appears when the squelch is opened by pressing the **MONI** button.

⑤ A

Appears when the selected channel is assigned to the scan list. The Scan function only scans the channels on the scan list.

⑥ SCN

Visible while scanning.

⑦

Displays the selected channel or squelch level. Also displays DTMF digits as they are programmed, confirmed, or transmitted. Messages received via Selective Call also are displayed here.

BASIC USE

RECEIVING

Your dealer may have programmed QT or DQT signaling for the channel that you select (DQT: TK-270/TK-370 only). If so programmed, you will hear transmissions from other transceivers IN YOUR SYSTEM ONLY! Otherwise, you will hear ALL TRANSMISSIONS made by ANY stations using the same channel.

■ Switching Power ON/OFF

To switch ON the transceiver:

Turn the **POWER/VOL** control clockwise.

- A "click" is heard. A beep also sounds if so programmed by your dealer.

To switch OFF the transceiver:

Turn the **POWER/VOL** control fully counterclockwise until a "click" is heard.

■ Adjusting Volume

To adjust the volume, tum the **POWER/VOL** control while using **[MONI]** to listen to channel background noise.

Your dealer selects one of four methods of operation for **[MONI]**:

- Hold down the button to open the squelch; release the button to close the squelch, or
- Hold down the button to deactivate QT, DQT, DTMF, or 2-Tone decoding; release the button to activate decoding, or
- Press the button to deactivate QT, DQT, DTMF, or 2-Tone decoding; press the button again to activate decoding, or
- Disabled.

While communicating with other parties, you may need to adjust the volume more precisely.

Note: *If your transceiver is programmed with QT, DQT, DTMF, or 2-Tone signaling, there will be virtually no noise coming from the speaker even at full volume (DQT and 2-Tone: TK-270/TK-370 only).*

■ Selecting a Channel

Use the **CHANNEL** selector to choose your regular operating channel. Turning the selector clockwise increases the channel number and turning the selector counterclockwise decreases the channel number.

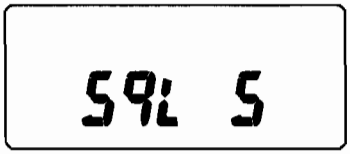
- You cannot select a channel unless it is programmed in your transceiver. This programming is done by your dealer.

■ Selecting a Squelch Level

The purpose of squelch is to silence the speaker when no signals are present. When squelch is open, you hear sound from the speaker. When squelch is closed, you hear no sound. The squelch level that you select determines under which conditions squelch is opened or closed. Selecting a squelch level that is too high prevents you from hearing audio while receiving a weak signal. Selecting a level that is too low forces you to listen to channel noise between transmissions made by other parties.

1 Hold down **[MONI]**, and then press **[LO]**.

- The current squelch level appears.



2 Turn the **CHANNEL** selector to select a squelch level from 0 ~ 9.

- Turning the **CHANNEL** selector clockwise raises the squelch level, and turning the selector counterclockwise lowers the level.

3 Press any key other than **[LAMP]** to complete the selection.

- The original display is restored.

CALLING

1 Press **[MONI]**, then listen for a few seconds to make certain that the channel is not being used.

- Your dealer selects how **[MONI]** functions {page 15}.

2 Hold the transceiver about 3 ~ 4 cm (1 1/2 inches) from your lips, press the **PTT** switch, and speak in your normal speaking voice.

- The LED lights red while you are transmitting.

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

■ Selecting Output Power

Your dealer programs each channel independently for either low output power or high output power. However, when you can reliably communicate with a party without using high power, selecting low power conserves the battery and reduces the risk of interfering with other communications.

Each time **[LO]** is pressed, the output power is toggled between low ("Lo" appears) and high ("Lo" disappears) provided the following conditions are true:

- Your dealer has activated the **[LO]** button,

and

- You have selected a channel that your dealer has programmed for high power.

Note:

- *If you press **[LO]** after selecting a channel programmed for low power, an error beep sounds and the power setting does not change.*
- *Switching from high power to low power simultaneously affects all channels that were programmed for high power. The power setting for each of these channels is switched to low.*

■ Transmitting Connect ID/ Disconnect ID

To access and release repeaters or telephone trunks, you may need the capability of sending Connect and Disconnect Identification signals.

This function is either enabled or disabled by your dealer. Your dealer will tell you which of the following methods you should use for your system.

To send a Connect ID:

Method 1: Press **[PTT]**.

Method 2: While holding down **[PTT]**, press **[DIAL]**, then **[*]**.

To send a Disconnect ID:

Method 1: Release **[PTT]**.

Method 2: While holding down **[PTT]**, press **[DIAL]**, then **[#]**.

■ Time-Out Timer (TOT)

The purpose of the time-out timer is to automatically interrupt continuous transmissions after a specified time elapses. Holding down **[PTT]** for longer than the programmed time causes the transceiver to stop transmitting and generate a warning tone. Releasing **[PTT]** cancels the warning tone.

Your dealer also can program a warning function that alerts you just before the time-out timer stops your transmission. After **[PTT]** is held down for the time specified by your dealer, a warning tone sounds that is different from the time-out timer tone.

■ Busy Channel Lockout

Activated or deactivated by your dealer, this function prevents you from interfering with other stations who may be using a channel. Pressing **[PTT]** while the selected channel is in use causes your transceiver to generate an audible warning tone. Your transceiver is inhibited in this situation so it will not transmit. Release **[PTT]** to cancel the alarm and restore the receive mode.

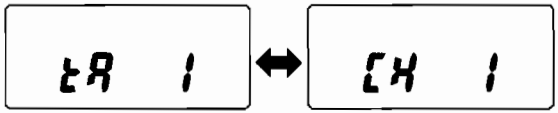
■ Battery Voltage Level

While holding down **[PTT]**, the battery voltage level is checked. When the voltage level drops to the predetermined value, the LED flashes red. When the voltage level drops further, the transceiver stops transmitting and generates an alarm. If this occurs, recharge the battery pack.

TALK-AROUND

Occasionally, a power failure or other cause at the repeater may result in an interruption of service. Your dealer may have provided the Talk-around function for use in such cases. This function allows communication directly with other transceivers without using a repeater. However, even Talk-around may not allow you to contact a station if the distance is too great or there are geographic obstacles in the way.

To toggle Talk-around ON or OFF, press **[TA]**.



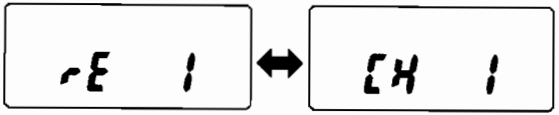
ON OFF

- When Talk-around is used, the transceiver transmits and receives on the frequency programmed for receive. For encoding and decoding, the QT/DQT signaling that is programmed for decode is used (DQT: TK-270/TK-370 only).

REVERSE

Your dealer may have programmed the Reverse function instead of the Talk-around function. When using Reverse, the transceiver transmits on the receive frequency and encodes using the QT/DQT signaling that is programmed for decode. Also, the transceiver receives on the transmit frequency and decodes using the QT/DQT signaling that is programmed for encode (DQT: TK-270/TK-370 only).

To toggle Reverse ON or OFF, press **[TA]**.



ON OFF

CHANNEL SCAN

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

Note:

- *Scan can only be used if your dealer has programmed at least 2 channels on the transceiver. Also, at least 2 channels must not have been locked out.*
- *Your dealer can best explain how Channel Scan functions when using Code Squelch, Selective Call, or 2-Tone signaling (2-Tone: TK-270/TK-370 only).*

SCAN OPERATION

After stopping on a busy channel, the transceiver reacts differently depending on the setup provided by your dealer. Your dealer has programmed either Time-operated or Carrier-operated operation.

■ Time-Operated Operation

The transceiver remains on a busy channel for a period of time that is preset by your dealer. After the time period passes, the transceiver continues to scan even if the channel remains busy.

■ Carrier-Operated Operation

The transceiver remains on a busy channel until the channel is no longer busy. Your dealer programs the delay time between the end of the busy state and scan resumption.

■ Using Scan

1 Press **[SCN]**.

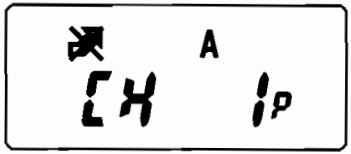
- Scanning starts from the currently displayed channel, then ascends in numerical sequence up through the channel numbers.
- "SCAN" replaces the channel number, and this word remains visible on the Display while scanning.

2 To quit scanning, press **[SCN]** again.

PRIORITY SCAN

If a Priority channel is preset by your dealer, the transceiver monitors that channel while receiving non-priority channels. When a signal is received on the Priority channel, the transceiver immediately switches to the Priority channel. The transceiver remains on a busy channel until the channel is no longer busy. Your dealer programs the delay time between the end of the busy state and scan resumption.

When the Priority channel is selected, "P" appears on the Display.



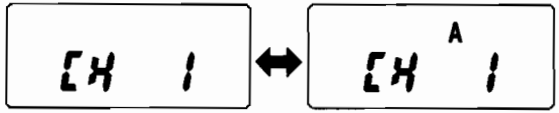
CHANNEL LOCKOUT

If so programmed by your dealer, Channel Lockout allows you to select channels to skip while scanning.

1 Using the **CHANNEL** selector and while not in Scan mode, select a channel to be skipped.

2 Hold down **[MONI]**, and then press **[SCN]**.

- Each time this key combination is pressed, the lock-out status toggles ON and OFF for the selected channel.



ON (Deleted) **OFF (Added)**

REVERT CHANNEL

When **[PTT]** is pressed, the transceiver stops scanning at the Revert channel and transmits on that channel. Consult with your dealer for further details since he programmed this function for your transceiver.

DTMF CALLING

MANUAL DIALING

To make a DTMF call, hold down **[PTT]** and press **[0]** ~ **[9]**, **[A]**, **[B]**, **[C]**, **[D]**, **[*]**, or **[#]**. If so programmed by your dealer, **[A]**, **[B]**, **[C]**, and **[D]** are not functional.

- The microphone is muted and the corresponding DTMF tones are transmitted. By listening to the speaker audio, you can monitor the tones as they are sent.
- If so programmed, when you press the next key within 2 seconds, you don't have to hold down **[PTT]**. The transceiver remains in the transmit state for 2 seconds after releasing each key.

STORE AND SEND DIALING

After entering a DTMF number with up to 16 digits maximum in the dedicated memory channel, you can transmit the stored number by simply pressing **[DIAL]**. To use Store and Send dialing, your dealer must activate the function.

■ Storing a Number

Using the keypad, enter the desired digits (16 digits maximum).

- As each digit is entered, the digit is displayed and the corresponding DTMF tone is heard.
- Even if your dealer has disabled **[A]**, **[B]**, **[C]**, and **[D]** for manual dialing, you can enter these digits.
- To exit from the store mode, press **[SCN]**, **[TA]**, **[LO]**, **[PTT]**, or **[MONI]**.

■ Dialing a Number

Press **[DIAL]** while the digits are currently displayed.

- The digits for the stored number scroll across the display and their associated DTMF tones are transmitted.
- If so programmed by your dealer, no DTMF tone is transmitted if "D" is stored since "D" represents a pause time. However, the transceiver remains in the transmit mode for the length of the pause time which is also programmed by your dealer.

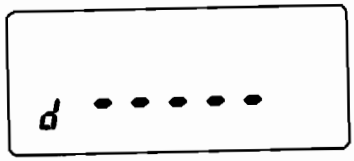
AUTO-DIALER

The Auto-dialer is either enabled or disabled by your dealer.

■ Storing DTMF Numbers

One DTMF number with a maximum of 16 digits can be stored in each of the 10 Auto-dial memory channels.

1 Press **[DIAL]**, and then **[#]**.



2 Using the keypad, enter up to 16 digits maximum for the number that you want to store.

- Even if your dealer has disabled **[A]**, **[B]**, **[C]**, and **[D]** for manual dialing, you can enter these digits.
- If incorrect digits are entered, press **[MONI]** and re-enter the entire number.
- To cancel entry mode and discard a partially entered number, press **[PTT]**, **[SCN]**, **[TA]**, or **[LO]**.

3 Press **[DIAL]**, and then **[0]** ~ **[9]**.

- Only press a single number corresponding to the desired Auto-dial memory channel.
- The original display is restored.

■ Confirming Stored DTMF Numbers

1 Press **[DIAL]**, and then **[*]**.

2 Enter the memory channel (0 ~ 9) that contains the DTMF number to be confirmed.

- The stored digits are displayed and the DTMF tones are heard from the speaker although no tones are transmitted.
- If so programmed by your dealer, no DTMF tone is heard if the digit "D" is stored in the memory channel since "D" represents a pause time. The length of this pause also is programmed by your dealer.

3 To restore the original display, press any key.

■ Transmitting Stored DTMF Numbers

1 Press **[DIAL]**.

2 Enter the Auto-dial memory channel (0 ~ 9) that contains the DTMF number to be transmitted.

- The stored digits are displayed as they are transmitted.
- If so programmed by your dealer, no DTMF tone is transmitted if "D" is stored in the memory channel since "D" represents a pause time. However, the transceiver remains in the transmit mode for the length of the pause time which is also programmed by your dealer.

■ Erasing Stored DTMF Numbers

1 Press **[DIAL]**, and then **[D]**.

2 Enter the Auto-dial memory channel (0 ~ 9) that contains the DTMF number to be erased.

- To cancel the process, press any key other than **[0]** ~ **[9]**.

REDIALING

You can re-transmit up to 16 digits maximum that you last sent while using Manual Dialing, Store and Send Dialing, or Auto-dialing.

Press **[DIAL]**, and then **[DIAL]** again.

- The digits last sent are displayed as they are re-transmitted.

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

CODE SQUELCH

Code Squelch is either enabled or disabled by your dealer. This function opens the squelch only when the transceiver receives a predetermined DTMF code that has 3 to 10 digits. Usually, each transceiver would be programmed with a unique code. Transceivers not transmitting the correct code will not be heard. Consequently, this function allows you to readily communicate with a single specific transceiver without listening to other transceivers that share the same channel.

Your dealer also may 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: *Code Squelch cannot be used on a channel that your dealer has programmed with Selective Call or 2-Tone signaling (2-Tone: TK-270/ TK-370 only).*

RECEIVING

When the same code is received that was programmed in the transceiver by your dealer, the squelch opens, and the caller is heard without any further action.

- Receiving the correct code causes a bar to appear on the Display and the LED to flash orange.
- Pressing **[MONI]** mutes the speaker after Code Squelch has opened the squelch.
- If so programmed by your dealer, after Code Squelch opens the squelch, the squelch automatically closes when a programmed time period passes.
- If your dealer has programmed Transpond {page 40}, an acknowledgment signal is returned from your transceiver to the station that called. However, Transpond does not function when you are called with a Group code.
- If your dealer has programmed Tone Alert {page 40}, both Tone Alert and Code Squelch can function together.

TRANSMITTING

1 Press and hold down **[PTT]**.

2 Using the keypad, enter the identical code that is programmed in the transceiver that you will call, or enter a Group code. If you prefer, you can use Store and Send Dialing {page 26} or Auto-dialer {page 28} instead.

- A bar appears on the Display, and the LED lights red.

3 Continue to use the transceiver normally, releasing **[PTT]** to receive and holding down **[PTT]** to transmit.

- The squelch on the transceiver being called will remain open for as long as you are transmitting plus a time period after you stop transmitting. This time period is programmed by your dealer.
- Releasing **[PTT]** causes the squelch to open and the LED to flash orange. When the transceiver receives a signal, the LED lights green. After the transceiver receives no further signals, the LED flashes orange again. After a time period programmed by your dealer passes during which no signal is received, the squelch closes and LED goes OFF. Pressing **[MONI]** also causes the squelch to close and the LED to go OFF.

SELECTIVE CALL

Selective Call is either enabled or disabled by your dealer. This function is similar to Code Squelch. The differences from Code Squelch are as follows:

- A message containing up to 5 digits maximum can be sent or received.
- Selective Call opens the squelch only when the transceiver receives predetermined DTMF codes in the correct sequence:
  - An ID code (3 digits), then
  - An Intermediate code (1 digit) followed by a message code.

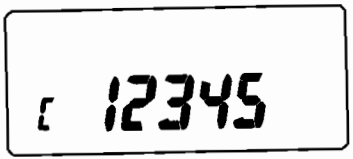
Your dealer also may activate Group Call for your transceiver. This is useful when you want to pass information to a number of units in a fleet. Ask your dealer for details.

RECEIVING

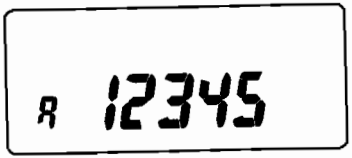
When the ID and Intermediate codes are received that were programmed in the transceiver by your dealer, the squelch opens. If a message code is also received, the message appears on the Display of the transceiver. The caller is heard without any further action.

Note: *When you select a channel that your dealer has programmed for Code Squelch or 2-Tone signaling, you cannot use this channel with Selective Call (2-Tone: TK-270/TK-370 only).*

- Receiving the correct codes causes a bar to appear on the Display and the LED to flash orange.
- When you are called with your ID code, "C" is displayed. For example: "C12345".



- When you are called with your Group code, "A" is displayed. For example: "A12345".



- When no message is received, "NO DATA" is displayed.
- A displayed message or "NO DATA" can be cleared from the Display by pressing any key other than **[LAMP]**.
- Pressing **[MONI]** mutes the speaker after Selective Call has opened the squelch.
- If so programmed by your dealer, after Selective Call opens the squelch, the squelch automatically closes when a programmed time period passes.

- If your dealer has programmed Transpond {page 40}, an acknowledgment signal is returned from your transceiver to the station that called. However, Transpond does not function when you are called with a Group code.
- If your dealer has programmed Tone Alert {page 40}, both Tone Alert and Selective Call can function together.

TRANSMITTING

1 Press and hold down **[PTT]**.

2 Using the keypad, enter the following codes in sequence. If you prefer, you can use Store and Send Dialing {page 26} or Auto-dialer {page 28} instead.

- The ID or Group code that was programmed in the transceiver that you will call (3 digits).
- The intermediate code that was programmed in the transceiver that you will call (1 digit).
- A message, if desired (0 to 5 digits).

When the transmission starts, a bar appears on the Display, and the LED lights red.

3 Continue to use the transceiver normally, releasing **[PTT]** to receive and holding down **[PTT]** to transmit.

- Releasing **[PTT]** causes the squelch to open and the LED to flash orange. When the transceiver receives a signal, the LED lights green. After the transceiver receives no further signals, the LED flashes orange again. After a time period programmed by your dealer passes during which no signal is received, the squelch closes and LED goes OFF. Pressing **[MONI]** also causes the squelch to close and the LED to go OFF.

2-TONE SIGNALING (TK-270/TK-370 ONLY)

2-Tone signaling is either activated or deactivated by your dealer. 2-Tone opens the squelch only when the transceiver sequentially receives the preset two tones that have different frequencies. For 2-Tone signaling, the transceiver is capable of decoding only.

Your dealer also may program Group Call. Ask him for details.

RECEIVING

When the correct tones are received that were programmed by your dealer, the squelch opens, and the caller is heard without any further action.

- Receiving the correct tones causes a bar to appear on the Display and the LED to flash orange. An alert tone is heard if so programmed by your dealer.

- Pressing **[MONI]** mutes the speaker after 2-Tone signaling has opened the squelch.
- If so programmed by your dealer, after 2-Tone opens the squelch, the squelch automatically closes when a programmed time period passes.
- If your dealer has programmed Transpond for 2-Tone, an acknowledgment signal is returned from your transceiver to the station that called. Unlike Transpond used with either Code Squelch or Selective Call {page 40}, Transpond for 2-Tone can transmit an alert tone only.
- If so programmed by your dealer, Tone Alert sounds. For Tone Alert designed for 2-Tone, beeps are generated.

TRANSMITTING

Press and hold **[PTT]**.

- A bar appears on the Display, and the LED lights red.
- Releasing **[PTT]** causes the squelch to open and the LED to flash orange. When the transceiver receives a signal, the LED lights green. After the transceiver receives no further signals, the LED flashes orange again. After a time period programmed by your dealer passes during which no signal is received, the squelch closes and LED goes OFF. Pressing **[MONI]** also causes the squelch to close and the LED to go OFF.

TONE ALERT

Tone Alert provides an audible and visual alarm to indicate when someone is calling you on the frequency you are monitoring. When the correct DTMF codes are received that are programmed in your transceiver, a ringing alarm sounds. You can stop this alarm by pressing any key.

TRANSPOND

Your dealer may activate Transpond together with Code Squelch or Selective Call. If so activated, when a call is received that has the correct code, Transpond automatically transmits an acknowledgment of receipt signal from your transceiver back to the calling transceiver. Your dealer selects the acknowledgment signal from the choices below:

- Alert tone
- Transceiver ID code
- Code stored in Auto-dialer memory channel 0.

A ringing alert tone can be stopped by pressing any key.

SELECTABLE QT

If so programmed by your dealer, you can change the preset QT frequencies in some channels of the transceiver.

1 Using the **CHANNEL** selector, select the desired channel.

2 Hold down **[MONI]**, and then press **[DIAL]**.

- The transceiver enters the Selectable QT mode.

3 Using the **CHANNEL** selector, select a frequency from the 39 QT frequencies.

- The newly selected QT frequency is valid only in the Selectable QT mode.

4 Hold down **[MONI]**, and then press **[DIAL]**.

- The transceiver exits the Selectable QT mode, and the original display is restored.

TRUNKING MODE

The transceiver must have the appropriate trunking boa installed before you can access Trunking mode. For details, consult your dealer.

To activate Trunking mode, press and hold **[MONI]**, then switch ON the transceiver. To deactivate Trunking mode repeat the same procedure. After activating this mode, only those key strokes listed below will function the same as before Trunking was activated:

- **[LAMP]**: Lamp function
- **[LO]**: Low transmit power
- **[MONI]+[LO]**: Squelch level