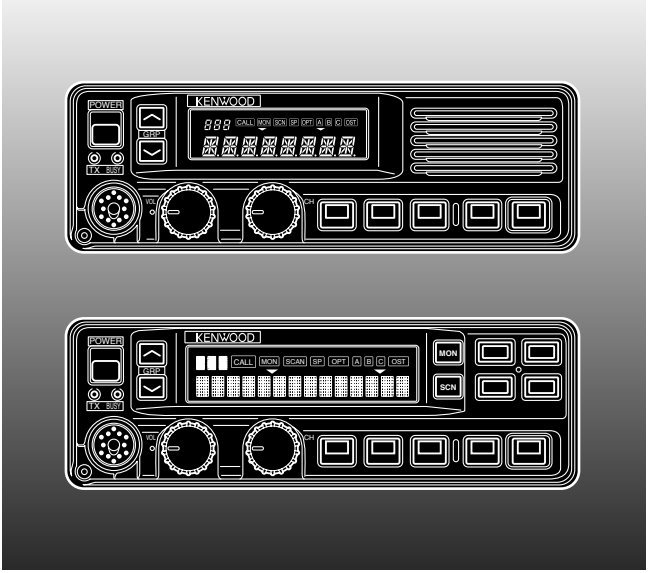
KENWOOD

INSTRUCTION MANUAL



VHF FM TRANSCEIVER

TK-5710 series

KENWOOD CORPORATION

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 the quality and features of this product.

MODELS COVERED BY THIS MANUAL

- **TK-5710:** VHF FM Transceiver
- **TK-5710H:** VHF 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 a gasoline service station. Do not carry spare fuel containers in the trunk of your vehicle if your transceiver is mounted in the trunk area.
- ***INJURY FROM RADIO FREQUENCY TRANSMISSIONS***
  Do not operate your transceiver when somebody is within two to three feet of the antenna, to avoid the possibility of radio frequency burns or related physical injury.
- ***DYNAMITE BLASTING CAPS***
  Turn OFF your transceiver when in an area where blasting is in progress, or where "TURN OFF TWO-WAY RADIO" signs have been posted. Operating the transceiver within 150 meters (500 feet) of dynamite blasting caps may cause them to explode. If you are carrying blasting caps in your vehicle, make sure they are enclosed in a metal box with a padded interior. Do not transmit while the caps are being placed into or are being removed from the container.

Note: *This instruction manual covers only the basic functions of the transceiver. Consult your dealer for more detailed information.*

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.*

WARNING!

- *VARIOUS ELECTRONIC EQUIPMENT IN YOUR VEHICLE MAY MALFUNCTION IF THEY ARE NOT PROPERLY PROTECTED FROM THE RADIO FREQUENCY ENERGY WHICH IS PRESENT WHILE TRANSMITTING. ELECTRONIC FUEL INJECTION, ANTI-SKID BRAKING, AND CRUISE CONTROL SYSTEMS ARE TYPICAL EXAMPLES OF EQUIPMENT THAT MAY MALFUNCTION. IF YOUR VEHICLE CONTAINS SUCH EQUIPMENT, CONSULT THE DEALER FOR THE MAKE OF VEHICLE AND ENLIST HIS AID IN DETERMINING IF THEY WILL PERFORM NORMALLY WHILE TRANSMITTING.*
- *ALTHOUGH THE REMOTE PANELS ARE WATER RESISTANT, THE MAIN TRANSCEIVER BODY IS NOT. MOUNT IT IN A PLACE WHERE IT WILL NOT GET WET.*

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

■ Tools Required

Note*: Before installing the transceiver, always check how far the mounting screws will extend below the mounting surface. When drilling mounting holes, be careful not to damage vehicle wiring or parts.*

The following tools are required for installing the transceiver:

- 6 mm (1/4 inch) or larger electric drill
- Drill bits (sizes listed below) and circle cutters

Drill Bit Size	Purpose
4.2 mm (5/32 inch)	5 x 16 mm self-tapping screws
3.2 mm (1/8 inch)	4 x 16 mm self-tapping screws

■ Power Cable Connection

CAUTION: *THE TRANSCEIVER OPERATES IN 12 V NEGATIVE GROUND SYSTEMS ONLY! CHECK THE BATTERY POLARITY AND VOLTAGE OF THE VEHICLE BEFORE INSTALLING THE TRANSCEIVER.*

1 Check for an existing hole, conveniently located in the firewall, where the power cable can be passed through.

- If no hole exists, use a circle cutter to drill the firewall, then install a rubber grommet.

2 Run the two power cable leads through the fire wall and into the engine compartment, from the passenger compartment.

3 Connect the red lead to the positive (+) battery terminal and the black lead to the negative (–) battery terminal.

- Locate the fuse as close to the battery as possible.

4 Coil and secure the surplus cable with the provided retaining band.

- Be sure to leave enough slack in the cables so the transceiver can be removed for servicing while keeping the power applied.

■ Installing the Transceiver

WARNING! *FOR PASSENGER SAFETY, INSTALL THE TRANSCEIVER SECURELY, USING THE SUPPLIED MOUNTING BRACKET, SO THE TRANSCEIVER WILL NOT BREAK LOOSE IN THE EVENT OF A COLLISION.*

1 Mark the position of the holes in the dash by using the mounting bracket as a template. Drill the holes, then attach the mounting bracket using the supplied 5 x 16 mm screws.

- Be sure to mount the transceiver in a location where the controls will be within easy reach of the user, and where there is sufficient space at the rear of the transceiver for cable connections.

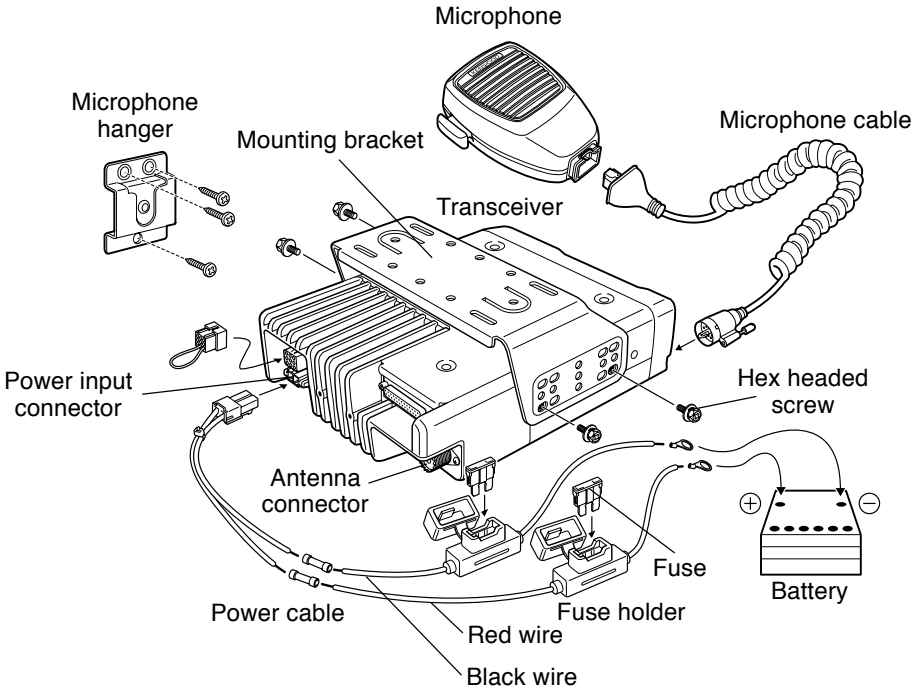
2 Connect the antenna and the supplied power cable to the transceiver.

3 Slide the transceiver into the mounting bracket and secure it using the supplied hex-headed screws.

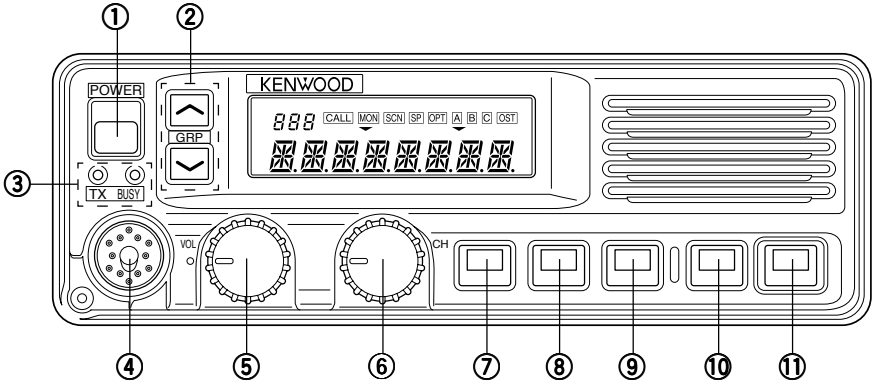
4 Mount the microphone hanger, using the supplied 4 x 16 mm screws, in a location where it will be within easy reach of the user.

- The microphone and microphone cable should be mounted in a place where they will not interfere with the safe operation of the vehicle.

5 Connect one plug of the microphone cable to the jack on the base of the microphone, and the other plug to the microphone jack on the front panel of the transceiver. Place the microphone on the hanger.



■ Basic Front Panel (KCH-14)



① **POWER** switch
Press to switch the power ON (or OFF).

② **GRP** (Group) keys
Press **GRP Up** to increase the group selection by one step. Press **GRP Down** to decrease the group selection by one step. (See page 11 for other programmable functions for these keys.)

③ **TX**, **BUSY** indicators
The **TX** (red) indicator lights while transmitting. The **BUSY** (green) indicator lights while the selected channel is in use.

④ Microphone connector
Insert the microphone plug into this connector and secure it using the attached screw. To remove the microphone, release the screw, then turn the connector clockwise until it becomes free.

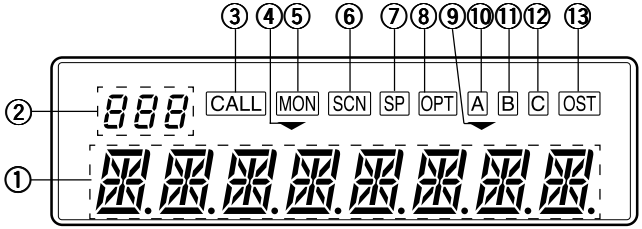
⑤ **VOL** (Volume) control
Turn clockwise to increase the volume, and counterclockwise to decrease it.

⑥ **CH** (Channel) control
Turn clockwise to increase the channel selection (default setting), and counterclockwise to decrease it. (Alternatively, this control can be programmed with group up/down.)

⑦ **PF1** key
⑧ **PF2** key
⑨ **PF3** key
⑩ **PF4** key
⑪ **PF5** key

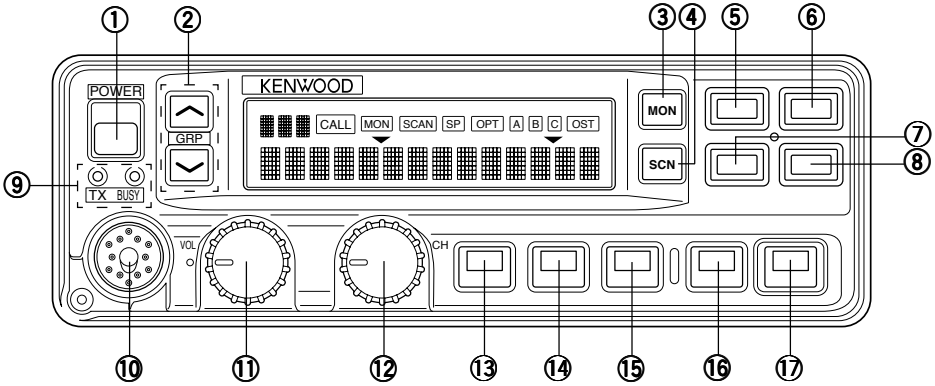
Press these PF (programmable function) keys to activate their programmable functions {page 11}. The default is set as No Function.

■ Basic Panel Display



①	8.8.8.8.8.8.8.8.	Displays the operating Group/ Channel number, the Group/ Channel name, and the transceiver status.
②	888	Displays the operating group or channel number. Also displays the channel status: **P1** indicates a Priority 1 channel; **P2** indicates a Priority 2 channel; **PP** indicates a Priority 1 and 2 channel; **HC** indicates a Home Channel; **tA** indicates Talk Around mode; **rCL** indicates a Recall Channel; **r1** ~ **r15** indicates remote channels.
③	CALL	Flashes when a call is received by DTMF or 2-Tone signaling. Appears during and after transmitting if set by the dealer.
④	▼	Appears when the selected group is in the scanning sequence if group scan has been set to “Multi” (please consult your dealer for setting the scan).
⑤	MON	Appears when signaling squelch is turned OFF.
⑥	SCN	Appears while scanning is in progress.
⑦	SP	Appears when audio output is set to PA speaker.
⑧	OPT	Appears when the optional scrambler board is enabled.
⑨	▼	Appears when the selected channel is in the scanning sequence.
⑩	A	Appears when Aux A is ON.
⑪	B	Appears when Aux B is ON.
⑫	C	Appears when Aux C is ON.
⑬	OST	Appears when Operator Selectable Tone is enabled.

■ Full-featured Front Panel (KCH-15)



① **POWER** switch
Press to switch the power ON (or OFF).

② **GRP** (Group) keys
Press **GRP Up** to increase the group selection by one step. Press **GRP Down** to decrease the group selection by one step. (See page 11 for other programmable functions for these keys.)

③ **MON** (Monitor) key
Press to cancel QT, DQT, 2Tone, and DTMF signaling squelch (default setting). Press and hold for 2 seconds to hear background noise (unmute the audio). (See page 11 for other programmable functions for this key.)

④ **SCN** (Scan) key
Press to start (or stop) the scanning sequence (default setting). (See page 11 for other programmable functions for this key.)

⑤ **PF6** key
⑥ **PF7** key
⑦ **PF8** key
⑧ **PF9** key

Press these PF (programmable function) keys to activate their programmable functions {page 11}. The default is set as No Function.

⑨ **TX**, **BUSY** indicators
The **TX** (red) indicator lights while transmitting. The **BUSY** (green) indicator lights while the selected channel is in use.

⑩ Microphone connector
Insert the microphone plug into this connector and secure it using the attached screw. To remove the microphone, release the screw, then turn the connector clockwise until it becomes free.

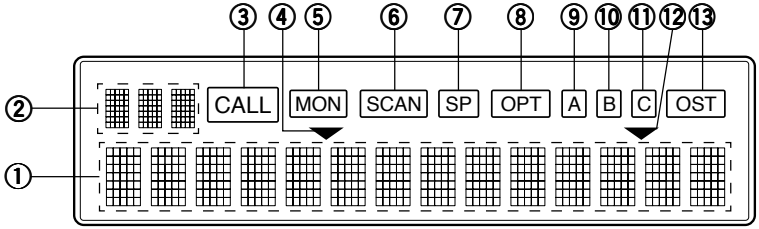
⑪ **VOL** (Volume) control
Turn clockwise to increase the volume, and counterclockwise to decrease it.

⑫ **CH** (Channel) control
Turn clockwise to increase the channel selection (default setting), and counterclockwise to decrease it. (Alternatively, this control can be programmed with group up/down.)

⑬ **PF1** key
⑭ **PF2** key
⑮ **PF3** key
⑯ **PF4** key
⑰ **PF5** key

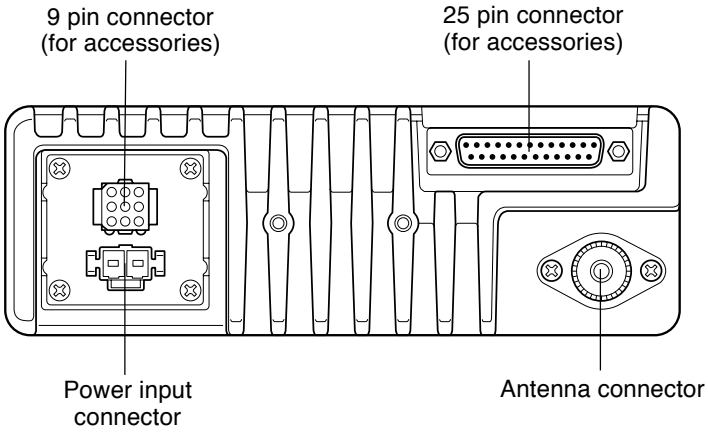
Press these PF (programmable function) keys to activate their programmable functions {page 11}. The default is set as No Function.

■ Full-featured Panel Display

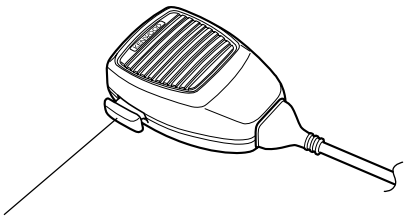


①	▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮▮	Displays the operating Group/ Channel number, the Group/ Channel name, and the transceiver status.
②	▮▮▮	Displays the operating group or channel number. Also displays the channel status: **P1** indicates a Priority 1 channel; **P2** indicates a Priority 2 channel; **PP** indicates a Priority 1 and 2 channel; **HC** indicates a Home Channel; **TA** indicates Talk Around mode; **RCL** indicates a Recall Channel; **R1** ~ **R15** indicates remote channels.
③	CALL	Flashes when a call is received by DTMF or 2-Tone signaling. Appears during and after transmitting if set by the dealer.
④	▼	Appears when the selected group is in the scanning sequence if group scan has been set to “Multi” (please consult your dealer for setting the scan).
⑤	MON	Appears when signaling squelch is turned OFF.
⑥	SCAN	Appears while scanning is in progress.
⑦	SP	Appears when audio output is set to PA speaker.
⑧	OPT	Appears when the optional scrambler board is enabled.
⑨	A	Appears when Aux A is ON.
⑩	B	Appears when Aux B is ON.
⑪	C	Appears when Aux C is ON.
⑫	▼	Appears when the selected channel is in the scanning sequence.
⑬	OST	Appears when Operator Selectable Tone is enabled.

■ Rear Panel



■ Microphone



PTT (Push To Talk) switch
Press and hold to transmit, then speak into the microphone. Release to receive.

PROGRAMMABLE FUNCTIONS

The following functions can be programmed onto the **GRP Up**, **GRP Down**, **MON**, **SCN**, and **PF1** ~ **PF9** keys. If desired, you do not need to have a function programmed onto a key (No Function). Please contact your dealer for more information on these functions.

(Channel Up/ Group Up)

(Channel Down/ Group Down)

Press these keys to increase or decrease the channel number or group number (respectively). Pressing the key momentarily will change the number by 1 step. Pressing and holding the key will scroll through the numbers.

AN (Channel Name)

Press this key to switch the display between the Group/ Channel number, and the Group/ Channel name (alphanumeric). A tone will sound each time you switch between numerical and alphanumerical display.

AUX A/ **AUX B**/ **AUX C**

Press these keys to turn the Aux A, Aux B, or Aux C output port (respectively) ON or OFF. When you press the key, the AUX A, AUX B, or AUX C icon appears and a tone sounds. When you press the key again, the icon disappears and a tone sounds.

CH 1 (CH 1 Direct)/ **CH 2** (CH 2 Direct)/ **CH 3** (CH 3 Direct)/ **CH 4** (CH 4 Direct)/ **CH 5** (CH 5 Direct)

Press these keys to directly select the Group 1/ Channel 1 directory, Group 1/ Channel 2 directory, Group 1/ Channel 3 directory, Group 1/ Channel 4 directory, or Group 1/ Channel 5 directory (respectively).

D/A (Delete/ Add)

Press this key to delete a channel/ group from, or add a channel/ group to, the scanning sequence.

Press this key to add the currently displayed channel to scan. The channel add icon appears. Press and hold this key for 2 seconds to add the currently displayed group to scan. The group add icon appears.

If a channel is already in the scanning sequence, and you want to delete it, press this key while the channel is displayed. The channel add icon disappears. If a group is already in the scanning sequency, and you want to delete it, press and hold this key for 2 seconds. The group add icon disappears.

Press this key while scanning when an undesired channel is displayed, to temporarily delete it from scan. If there are only 2 channels in the scanning sequence, this function cannot be performed. To restore the original scanning sequence, turn scan OFF, then ON.

DIM (Dimmer)

Press this key to adjust the brightness of the display and key backlight. Also press this key to turn the TX and BUSY indicators and the DTMF microphone keypad backlight ON or OFF.

EMG (Emergency Call)

Press this key to initiate an emergency call (requires ANI board). When an emergency call is made, no tone is emitted and the display does not change. To end the emergency call, turn the transceiver power OFF.

HA (Horn Alert)

Press this key to turn the Horn Alert function ON or OFF. If you receive a call from the base station with 2Tone or DTMF signaling, horn alert will activate. When you turn Horn Alert ON, a tone will sound and HA (or HORN ALERT) appears on the display.

HC (Home Channel: fixed/ toggle)

Fixed: Press this key to select the pre-programmed Home Channel.

Toggle: Press this key to select the pre-programmed Home Channel. Press it again to return to the previous channel. If used while scanning, pressing this key a second time will change to the revert channel.

IC (Intercom)

This feature requires dual head configuration. Press this key to turn the intercom feature ON or OFF. While ON, you can press the **PTT** switch to communicate to another control head operator without transmitting over the air. When you press this key, a tone sounds and INTERCOM appears on the display. The intercom can be used even while scanning and receiving a call.

MON (Monitor)

Press this key to cancel QT/DQT and 2-Tone/DTMF signaling squelch. Press and hold this key for 2 seconds to hear background noise (unmute the audio). When monitor is being used, the MON icon appears on the display.

OPT (Scrambler)

If you have an optional scrambler board installed in your transceiver, you can press this key to turn it ON or OFF. When enabled, a tone sounds and the OPT icon appears on the display. To change the scrambler code:

1 Press and hold the **OPT** key for 1 second. A tone sounds and CODE appears on the display with the current code.

2 Press the **GRP Up**/ **Down** keys, or use the **CH** control to select the desired setting.

3 Press the **OPT** key. A tone sounds and the display returns to the normal channel.

OST (Operator Selectable Tone)

This feature allows you to select a signaling tone from the pre-programmed QT/DQT list. Press this key to activate OST. The OST icon appears on the display. To select a decode/encode pair:

1 Press and hold the **OST** key for 1 second. A tone sounds.

2 Press the **GRP Up**/ **Down** keys, or use the **CH** control to select the desired decode/encode pair. TONE and the tone number or OST and the OST name appear on the display.

3 Press the **OST** key. A tone sounds and the display returns to the normal channel.

PA (Public Address)

Press this key to use the transceiver as a PA amplifier. When you enable this function, a tone sounds and PA (or PUBLIC ADDRESS) appears on the display. The public address can be used even while scanning and receiving a call.

RCL (Channel Recall)

During scan, you can press this key to select the last called channel. rCL (or RCL) will appear on the display. Press this key a second time to return to the previous channel.

SCN (Scan)

Press this key to start or stop the scanning sequence. When you activate scan, a tone sounds, the SCN (or SCAN) icon appears, and SCAN or the OFF HOOK revert channel number appears on the display. If there is less than 2 channels in the scanning sequence, an error tone sounds. Scan can be set up two different ways: ON HOOK or OFF HOOK. ON HOOK requires the microphone to be on the hook before scanning will activate. OFF HOOK allows you to activate scan whether the microphone is on or off the hook.

When a signal is received while scanning, the scan will halt, the audio is unmuted, and the channel number or name appears on the display.

If Priority1 or Priority2 is programmed, this priority channel is periodically checked for a signal while a signal is being received on a normal channel. When a signal appears on the priority channel, the transceiver will automatically switch to that channel.

If Priority1 and Priority2 are programmed, the Priority1 channel takes precedence. The transceiver acts the same as if there is one priority channel except that it checks both priority channels rather than a single channel. Also, if a signal is being received on the Priority2 channel, the Priority1 channel is still periodically checked for a signal.

To enter carrier squelch scan, press the **MON** key while scan is in progress.

SP (Speaker Internal/ External)

Press this key to switch between “Internal” and “External” speaker. When “External” is selected, a tone sounds and the SP icon appears on the display. You can use this function while scanning and receiving a call. However, all audio will be emitted from the PA speaker.

SPM (Speaker 1-2 Mute)

This feature requires dual head configuration. Press this key to disable the speaker audio from the other control head. When pressed, a tone sounds and MUTE appears on the display with the muted head number.

SQ (Squelch Level)

You can manually adjust the squelch level using this function:

1 Press the **SQ** key. A tone sounds and SQL (or SQUELCH) appears on the display with the current squelch level.

2 Press the **GRP Up**/ **Down** keys, or use the **CH** control to select the desired level.

3 Press the **SQ** key. A tone sounds and the display returns to the normal channel.

TA (Talk Around)

Press this key to make a call without using a repeater. When you activate this function, a tone sounds and tA (or TA) appears on the 3-digit display. This function is useful when you are close to the mobiles you want to talk to.

■ Switching Power ON/ OFF

Press the **POWER** switch to switch the transceiver ON (or OFF)

- The display backlight illuminates when the power is switched ON.

■ Adjusting the Volume

Turn the **VOL** control clockwise to increase the volume, and counterclockwise to decrease it.

■ Selecting a Group

Press the **Group Up** or **Group Down** keys, or use the **CH** control (depending on which one is programmed with the group functions).

- Pressing **Group Up** or **Group Down** will increase or decrease the group selection.
- Turning the **CH** control clockwise will increase the group selection, and turning it counterclockwise will decrease the selection.

■ Selecting a Channel

Press the **Channel Up** or **Channel Down** keys, or use the **CH** control (depending on which one is programmed with the channel functions).

- Pressing **Channel Up** or **Channel Down** will increase or decrease the channel selection.
- Turning the **CH** control clockwise will increase the channel selection, and turning it counterclockwise will decrease the selection.

■ Making a Call

1 Select the desired group and channel (above).

- Make sure the channel is not in use. If the channel is in use, the **BUSY** (green) indicator will light; wait until the channel is no longer in use.

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

- For best results, hold the transceiver approximately 3 to 4 cm (1 1/2 inches) from your lips.

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

4 Replace the microphone on the hanger when the call is finished.

DTMF CALLS

You can make DTMF calls using the optional KMC-28 DTMF microphone.

■ Manual Dialing

To dial a number manually:

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

- If Keypad Auto PTT is enable, you do not need to press the **PTT** switch (please consult your dealer for enabling this function).

2 Press the desired DTMF keys.

■ Redialing

A maximum of 16 digits can be redialed. The last number dialed, either manually or automatically, will be redialed.

To redial a number:

1 Press the ✳ key.

- An "A" will appear on the display.

2 Press the **0** key.

- The transceiver will redial the last number, and the digits will appear on the display.

Note: *If the transceiver power is switched OFF, the redial memory will be erased.*

■ Auto Dialing

Note: *Auto dialing is either enabled or disabled by your dealer.*

Store:

To store a number in memory:

1 Press the # key.

- A "D" will appear on the display.

2 Press the desired DTMF keys to enter a maximum of 16 digits.

- Press and hold the PTT switch, then press 2, 5, 8, 0, ✳, or # to enter A, B, C, D, ✳, or # (respectively).

3 Press the # key.

4 Select the desired memory channel by pressing a DTMF key (**1** ~ **9**).

- The number entered in step 2 will be stored in the memory channel selected.

Confirm:

To confirm a stored number:

1 Press the # key.

- A “D” will appear on the display.

2 Press the ∗ key.

- “D–” will appear on the display.

3 Press the memory channel key (**1** ~ **9**) with the stored number you want to confirm.

- The stored digits will appear on the display and the DTMF tones will sound.

Send:

To send a stored number:

1 Press the ∗ key.

- An “A” will appear on the display.

2 Press the memory channel key (**1** ~ **9**) with the stored number you want to send.

- The transceiver will begin the transmission and the digits will appear on the display.

Clear:

To erase a stored number from memory:

1 Press the # key.

- A “D” will appear on the display.

2 Press the # key again.

- “D–CLR” will appear on the display.

3 Press the memory channel key (**1** ~ **9**) with the stored number you want to erase.

OTHER TRANSCEIVER FUNCTIONS

The following functions can be set up by your dealer.

■ Time-out Timer (TOT)

The TOT is used to automatically inhibit transmission after a specified time elapses. If the **PTT** switch is held down for longer than the programmed time, the transceiver will stop transmitting and a warning tone will sound. To stop the warning tone, release the **PTT** switch.

■ Busy Channel Lockout (BCL)

BCL prevents you from interfering with other stations that may be using the same channel as you. When you press the **PTT** switch while the channel is in use, a warning tone sounds and the transceiver does not transmit. To stop the warning tone, release the **PTT** switch.

If BCL override has been enabled, you can press the **PTT** switch again within 0.5 seconds to cancel BCL. The transceiver will transmit.

■ Operator Selectable Priority Channel

You can set Priority1 and Priority2 channels when this function is enabled. To set a Priority1 channel, press and hold the **SCN** key, then press the **MON** key 3 times. To set a Priority2 channel, press and hold the **SCN** key, then press the **MON** key 2 times.

■ 2-Tone/ DTMF Signaling

2-Tone/ DTMF signaling will only open the squelch when the proper code is received. When the transceiver receives a correct code, the CALL icon flashes.

If transpond has been enabled, the transceiver automatically sends an acknowledgement signal after receiving the 2-Tone/ DTMF signal.

If alert tone has been enabled, an alert tone sounds after receiving the 2-Tone/ DTMF signal.

■ Roll Over/ Dead End

If roll over is enabled and you are pressing the **GRP Up**/ **Down** keys, or rotating the **CH control**, when you reach the maximum or minimum number, the number will roll over to the minimum or maximum number. For example, when turning the **CH control** clockwise, the channel number increases. When it reaches its maximum value, it rolls over to its minimum value and then starts to increase again.

If dead end is selected, when you reach the maximum or minimum value, the value will not change. For example, when turning the **CH control** clockwise, the channel number increases. When it reaches its maximum value, it stops. You must then rotate the **CH control** counterclockwise to change the value.

■ Dead Beat Disable (DBD)

After receiving a DBD code, the transceiver will automatically send an acknowledgement signal. Transmission is disabled. If the radio receives a DBD reset code, the transceiver will automatically send an acknowledgement signal. Transmission is enabled.

■ Timed Power OFF

This function requires an ignition-sense which must be connected to the 9 pin connector on the rear panel of the transceiver. When you turn the ignition of your vehicle OFF, the timer starts. After the pre-selected time expires, the transceiver will turn OFF. The timer resets when the ignition is turned ON and OFF.

MANDATORY SAFETY INSTRUCTIONS TO INSTALLERS AND USERS

- Use only manufacturer or dealer supplied antenna.
- Antenna Minimum Safe Distance: **180 cm (6 feet), 50% duty Cycle.**
- Antenna Gain: **0** dBd referenced to a dipole.

The Federal Communications Commission has adopted a safety standard for human exposure to RF (Radio Frequency) energy which is below the OSHA (Occupational Safety and Health Act) limits.

- Antenna Mounting: The antenna supplied by the manufacturer or radio dealer must not be mounted at a location such that during radio transmission, any person or persons can come closer than the above indicated minimum safe distance to the antenna, i.e. **180 cm (6 feet) , 50% duty Cycle.**
- To comply with current FCC RF Exposure limits, the antenna must be installed at or exceeding the minimum safe distance shown above, and in accordance with the requirements of the antenna manufacturer or supplier.
- Vehicle installation: The antenna can be mounted at the center of a vehicle metal roof or trunk lid, if the minimum safe distance is observed.
- Base Station Installation: The antenna should be fixed-mounted on an outdoor permanent structure. RF Exposure compliance must be addressed at the time of installation.

Antenna substitution: Do not substitute any antenna for the one supplied or recommended by the manufacturer or radio dealer.
You may be exposing person or persons to excess radio frequency radiation. You may contact your radio dealer or the manufacturer for further instructions.

Maintain a separation distance from the antenna to person(s) of at least **180 cm (6 feet) , 50% duty Cycle.**

“This transmitter is authorized to operate with a maximum duty factor of 50%, in typical push-to-talk mode, for satisfying FCC RF exposure compliance requirements.”

You, as the qualified end-user of this radio device must control the exposure conditions of bystanders to ensure the minimum separation distance (above) is maintained between the antenna and nearby persons for satisfying RF Exposure compliance. The operation of this transmitter must satisfy the requirements of Occupational/Controlled Exposure Environment, for work-related use, transmit only when person(s) are at least the minimum distance from the properly installed, externally mounted antenna. Transmit only when people outside the vehicle are at least the recommended minimum lateral distance away from the antenna/vehicle.