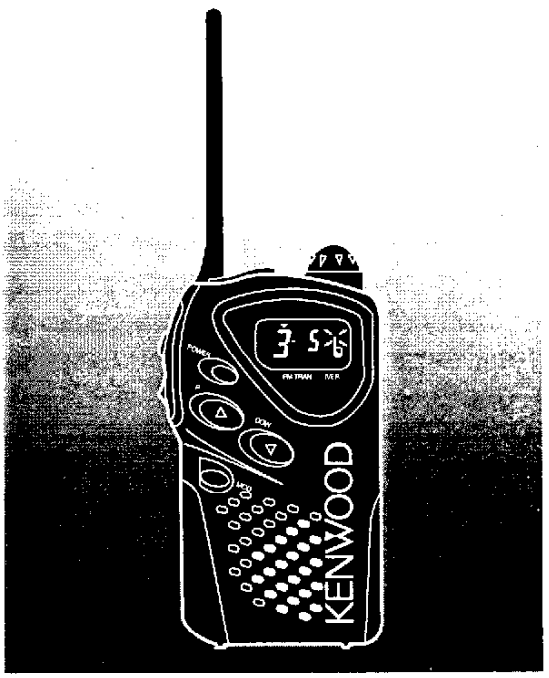
KENWOOD

INSTRUCTION MANUAL



UHF FM TRANSCEIVER

UBZ-LF14

KENWOOD CORPORATION

© B62-0808-00 (K)

09 08 07 06 05 04 03 02 01 00

KENWOOD MEANS WIRELESS

Founded more than 50 years ago, **KENWOOD**'s Car & Home Audio products are in demand around the world. **KENWOOD** is also a major developer and producer of wireless and digital wireless communications products. **KENWOOD** provides top quality Amateur Radio products for the serious hobbyist, and commercial radio products and systems for business, industry, & public safety users, worldwide.

INFORMATION

If you would like information on other quality **KENWOOD** products, please call (USA only):

800-KENWOOD

KENWOOD is on the Web:

Communications Products: Amateur, Land Mobile (Commercial), Systems:

http://www.kenwood.net

Consumer Electronics: Home & Car Audio, Stage 3, Computer Products:

http://www.kenwoodusa.com

INTRODUCTION

KENWOOD welcomes you to the Family Radio Service (FRS). FRS is the new, personal, short range 2-way radio band for family & friends to keep in touch without the need for a license, or radio knowledge, or monthly charges. Your **KENWOOD** 2-way Family Radio is called a "transceiver", meaning "transmitter & receiver".

You can choose from 14 preset channels (the full range allowed by the FCC) to communicate with others. For your convenience, an AUTOMATIC SQUELCH quiets your transceiver when not receiving calls. For privacy, your transceiver has two useful features; TONE SQUELCH ("CTCSS") keeps your transceiver quiet except for the calls you want to hear, and a SCRAMBLER keeps your conversations private.

Your transceiver provides safety and convenience almost anywhere, indoors or outside. The distance depends on your location; you'll get maximum distance of up to approximately two miles in open areas, less in buildings or vehicles.

Your **KENWOOD** transceiver is a precision device. Treat it with care, and you will enjoy years of reliable operation.

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PRECAUTIONS

- Do not modify or attempt to adjust the transceiver for any reason.
- Avoid extremes in exposure to water, heat, and cold. This transceiver is weather resistant but not waterproof.
- 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, wet areas, nor on unstable surfaces.
- If an abnormal odor or smoke is detected coming from the transceiver, immediately switch OFF the power and remove the batteries from the transceiver. Contact your **KENWOOD** dealer.

UNPACKING

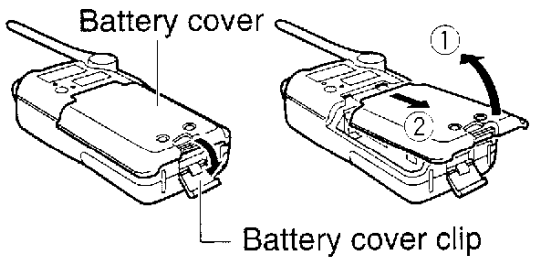
Carefully unpack the transceiver. We recommend that you identify the items listed below before discarding the packing material.

- Transceiver 1
- Belt hook 1
- Instruction manual 1
- Warranty card 1

INSTALLING/ REMOVING BATTERIES

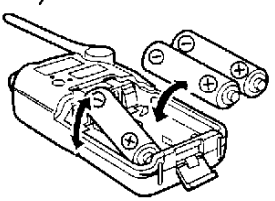
The transceiver requires 3 AA batteries. Use high quality alkaline batteries to enjoy longer periods of battery life. When the battery voltage becomes low, beeps sound and the BATT icon appears and blinks {page 7}. Replace the batteries at this time.

1 Release the battery cover clip, then remove the battery cover.



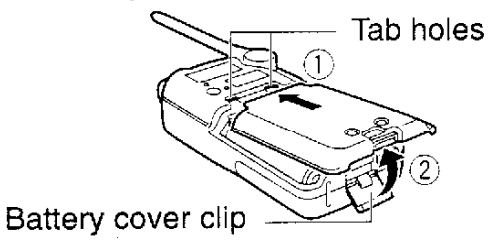
Note: *Remove the belt hook first if it has been installed.*

2 Insert (or remove) the 3 AA batteries.



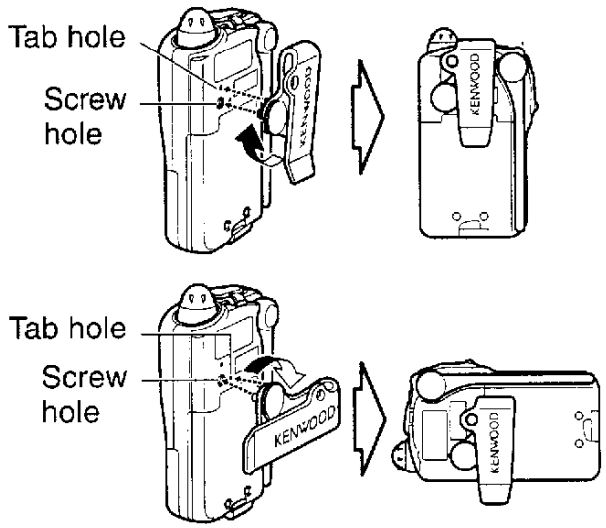
Note: *Make sure the battery + and – terminals are aligned as shown above.*

3 Align the battery cover tabs with the transceiver tab holes then replace the cover.



INSTALLING THE BELT HOOK

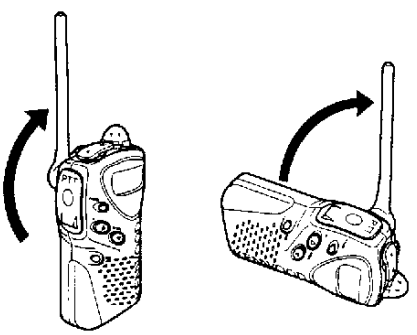
1 Align the screw with the screw hole and tab with one of the tab holes.



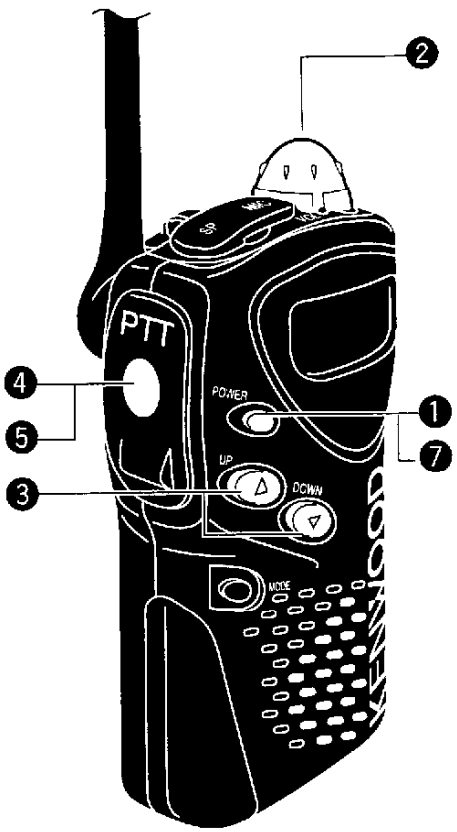
2 Turn the screw clockwise until secure.

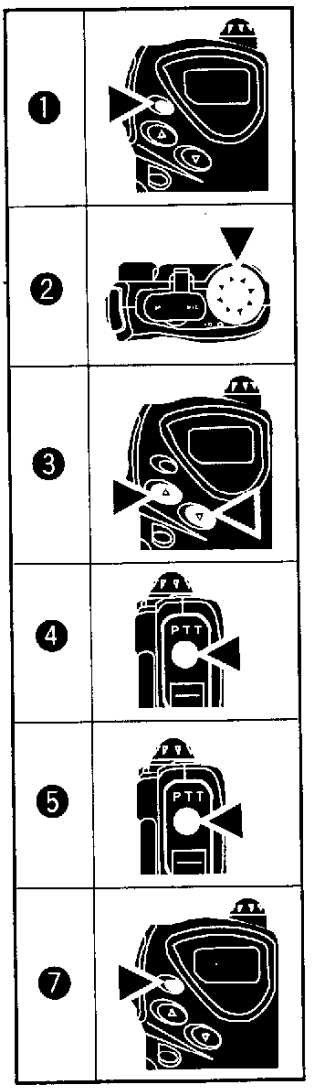
ADJUSTING THE ANTENNA

You can adjust the antenna to two different click positions.



Note: *For best results, the antenna should be operated in the vertical position.*


PTT
POWER
UP
DOWN
MODE
KENWOOD
1
2
3
4
5
7


1
2
3
4
PTT
5
PTT
7

❶ Press the **POWER** switch for more than 1 second to turn the transceiver power ON.

❷ Turn the **VOL** control clockwise to increase the volume or counterclockwise to decrease the volume.

- You may need to adjust the volume more precisely while hearing audio from the speaker in the next step.

❸ Press the **UP** or **DOWN** key to select the operating channel from among the 14 pre-programmed channels.

- You have to select the same channel as your group members selected.
- Press and hold either key to continuously change channels.
- When you receive a call, you will hear audio from the speaker.

❹ To make or answer a call, press and hold the **PTT** switch, then speak into the microphone in your normal speaking voice.

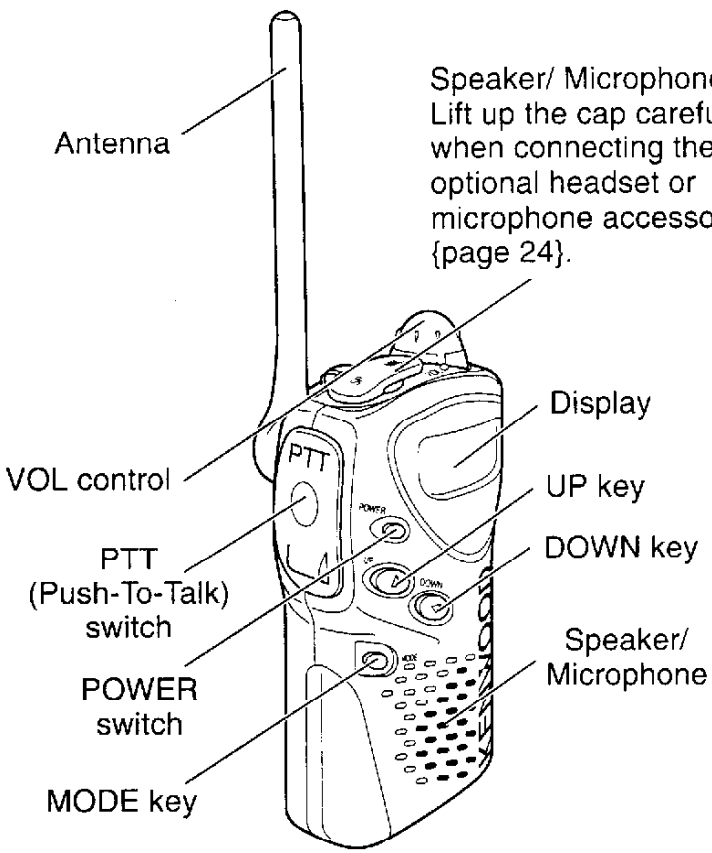
- Hold the transceiver about 3 to 4 cm from your lips.

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

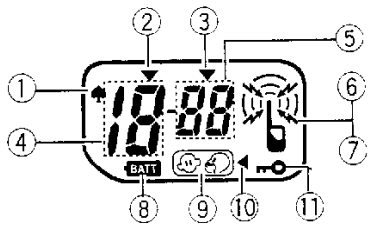
❻ Repeat steps ❹ and ❺ to continue communication.

❼ To turn the transceiver power OFF, press the **POWER** switch for more than 1 second.

ORIENTATION



DISPLAY



①	▲	Appears while the Auto Power Off (APO) timer {page 20} is counting. Blinks after APO turns the power OFF.
②	▼	Appears when the channel is changeable.
③	▼	Appears and blinks when the CTCSS number is changeable {page 12}.
④	18	Displays the current channel number (1 to 14).
⑤	88	Displays the current CTCSS number (1 to 38) or OFF ("OF") {page 12}.
⑥		Appears while monitoring {page 22} or receiving. You must not transmit while this icon is visible.
⑦		Appears while transmitting.
⑧	BATT	Appears and blinks when the battery voltage is low.
⑨		Appears when the Scrambling function is ON {page 13}.
⑩	◀	Appears and blinks when the Scrambling function can be switched ON or OFF {page 13}.
⑪		Appears when Key Lock is ON {page 18}.

CALL TONES

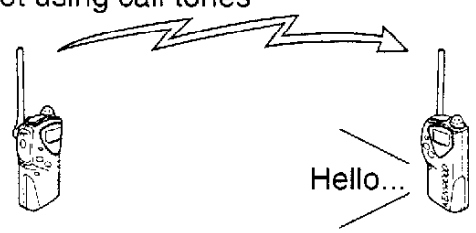
Call tones sound like a telephone ring, and are convenient for quickly identifying yourself to another party. Persons whom you call will instantly recognize you because of your call tone. The **UP** and **DOWN** keys are pre-assigned one tone each; the Mic **3** key on the optional SMC-34 Mic also is assigned one tone.

Note: *The Mic **3** key does not operate during Channel Scan {page 14}.*

Using call tones

Oh!
It's him/her.

Not using call tones



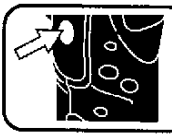
Who???
It's him/her.

SENDING CALL TONES

Press and hold the **PTT** switch, then press the **UP**, **DOWN**, or Mic **3** key.

- The receiving party will hear the same call tone as you hear.
- Simply pressing the Mic **3** key also sends the assigned call tone.

Release the **UP**, **DOWN**, or Mic **3** key to stop sending the call tone.



Speak into the microphone without releasing the **PTT** switch; or, release the **PTT** switch to receive.

CHANGING THE DEFAULT CALL TONES

You can change the default tones assigned to the **UP** and **DOWN** keys. Choose from two selectable tones for each key.

Turn the power OFF.

While pressing the **PTT** switch and either the **UP** or **DOWN** key, turn the power ON.

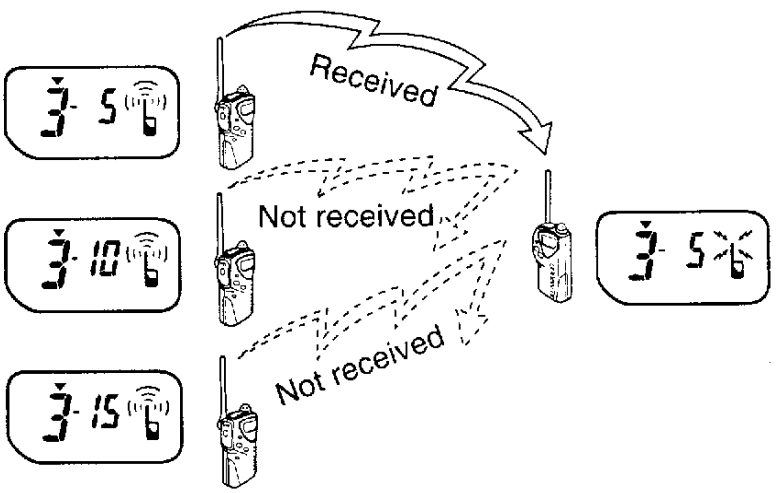
- The selected tone will sound.

To change back to the original tone, repeat the above steps.

PRIVACY TONE SQUELCH (CTCSS)

You may sometimes want to hear calls from only specific persons. The Continuous Tone Coded Squelch System (CTCSS) allows you to ignore (not hear) unwanted calls from other persons who are using the same channel. Simply select the same CTCSS tone (number) as selected by the other persons in your group. A CTCSS tone is subaudible and is selectable from among the 38 standard tone frequencies.

Note: *CTCSS does not cause your conversation to be private. It only relieves you of listening to unwanted conversations.*



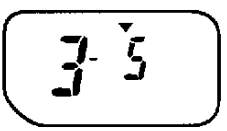
No.	Freq. (Hz)	No.	Freq. (Hz)	No.	Freq. (Hz)	No.	Freq. (Hz)
1	67.0	11	97.4	21	136.5	31	192.8
2	71.9	12	100.0	22	141.3	32	203.5
3	74.4	13	103.5	23	146.2	33	210.7
4	77.0	14	107.2	24	151.4	34	218.1
5	79.7	15	110.9	25	156.7	35	225.7
6	82.5	16	114.8	26	162.2	36	233.6
7	85.4	17	118.8	27	167.9	37	241.8
8	88.5	18	123.0	28	173.8	38	250.3
9	91.5	19	127.3	29	179.9		
10	94.8	20	131.8	30	186.2		

Press the **MODE** key.

- The current CTCSS number appears with a blinking cursor. The default is OFF ("OF").

Press the **UP** or **DOWN** key to select the desired CTCSS number 1 to 38.

- Confirm that persons in your group will select the same CTCSS number as you select.



- Keep holding down the **UP** or **DOWN** key to continuously change CTCSS numbers.

Press the **MODE** key twice to complete the selection.

- If you select OFF in the above step, press the **MODE** key only once.

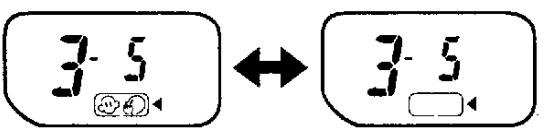
SCRAMBLING

While using CTCSS, you do not hear unwanted calls on your selected channel, but others on the same channel may hear your conversation. This transceiver also allows you to scramble your calls so that others will not understand your conversation.

Select the desired CTCSS number {page 12}.

Press the **MODE** key once or twice to enter the Scrambling ON/OFF mode.

Press the **UP** or **DOWN** key to switch Scrambling ON (or OFF).



ON OFF

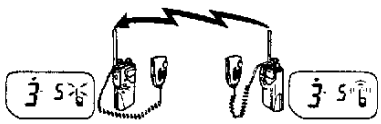
Press the **MODE** key again to complete the selection.

Note: *If you have selected OFF for the CTCSS number, you cannot enter the Scrambling ON/OFF mode. Selecting OFF for CTCSS number after switching Scrambling ON switches Scrambling OFF automatically.*

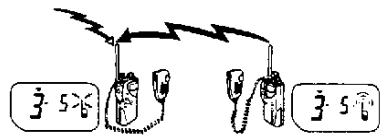
CHANNEL SCAN

Channel Scan is available only with the optional SMC-34 speaker microphone. This function is useful for finding a free channel to use for transmitting or finding a channel where a call with the matched CTCSS number is received (busy channel). Select the appropriate CTCSS number {page 12} before using Channel Scan.

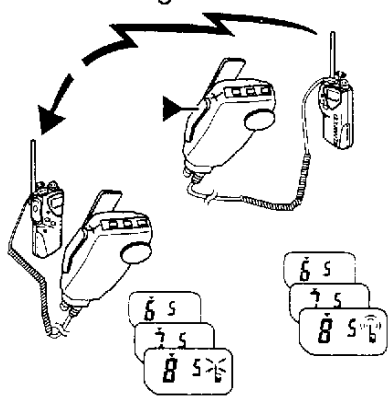
Note: *The APO timer {page 20} does not count while scanning.*

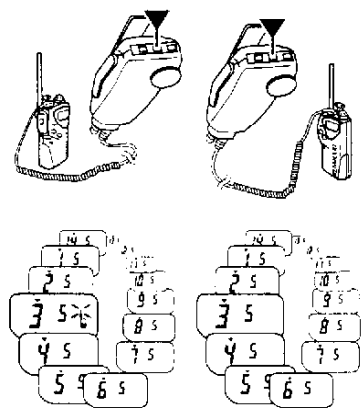


Interference

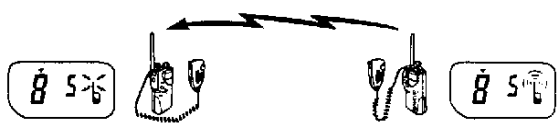


Finding a free channel





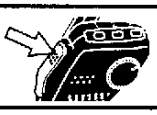
Finding a busy channel



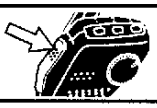
FINDING A FREE CHANNEL

Channel Scan helps you easily find a channel that is free to use for transmitting.

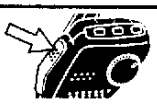
Press the Mic **2** key for more than 1 second.
- To cancel scanning, momentarily press this key again.



Press and hold the Mic **PTT** switch.
- Channel Scan finds and stops at a free channel.



Without releasing the Mic **PTT** switch, speak into the microphone.



To receive, release the Mic **PTT** switch.
- If no response is received for approx. 10 seconds, Scan automatically resumes.

FINDING A BUSY CHANNEL

Channel Scan also monitors the channels one by one and stops at a channel where a call with the matched CTCSS number is received. After stopping at that channel for approximately 10 seconds, Channel Scan resumes monitoring the channels.

Press the Mic **2** key for more than 1 second.
- Scan starts and monitors the channels in the ascending order.
- Scan stops when finding a busy channel. The channel number blinks.
- To halt scanning and monitor the current channel, press and hold the Mic **1** key. Releasing the Mic **1** key resumes scanning.

To stop scanning, momentarily press the Mic **2** key again.

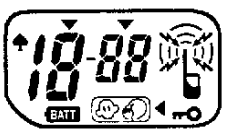
AUXILIARY FUNCTIONS

RESET

You can reset the transceiver to the original factory default settings.

Turn the power OFF.

While pressing the **UP** and **DOWN** keys, turn the power ON.



- Upon releasing the keys, a beep sounds.

TRANSMIT POWER SAVE

The purpose of Transmit Power Save is to prevent transmitting for too long. This function is useful, for example, when you accidentally keep the **PTT** switch pressed. You can switch the limit time between 3 (default) and 10 minutes.

Turn the power OFF.

While pressing the **PTT** switch and **MODE** key, turn the power ON.

To switch back to 3 minutes, repeat the above steps.

Holding down the **PTT** switch for more than the selected time causes the transceiver to generate a beep and stop transmitting. Release, then press the **PTT** switch to resume transmitting.

KEY LOCK

This function locks most of the keys on the transceiver to prevent accidentally changing any transceiver settings.

Turn the power OFF.

While pressing the **MODE** key, turn the power ON.

- The Key Lock icon appears.

To turn the Key Lock function OFF, repeat the above steps.

While Key Lock is active, you can still do the following:

- Power ON/OFF {page 5}
- Receive/ Transmit {page 5}
- Send call tones {page 9}
- Reset {page 16}
- Monitor {page 22}

***Note**: With the Beep function {page 21} and Key Lock function ON, pressing a locked key causes the transceiver to output an error beep.*

LAMP CONTROL

The lamp is used to illuminate the Liquid Crystal Display. It turns ON every time you press the **UP**, **DOWN**, **MODE**, or Mic **2** key (on the optional SMC-34), and when you turn the power ON. The lamp will go out after 5 seconds.

- If you press the **UP**, **DOWN**, **MODE**, or Mic **2** key again while the lamp is currently ON, the lamp timer will restart the 5 second countdown.
- The lamp stays ON while holding down the **UP** or **DOWN** key to continuously change channels or CTCSS numbers.

To set the lamp continuously ON:

Turn the power OFF.

While pressing the **MODE** and **UP** keys, turn the power ON.

To deactivate the continuous lamp setting, repeat the above steps.

Note:

- *The APO function (page 20) will override the continuous lamp setting, and when APO turns OFF the transceiver, it will also turn OFF the lamp. However, the lamp setting will remain and the lamp will again turn ON when the power is turned ON.*
- *The amount of power consumed with lamp continuously ON is slightly more than with lamp OFF.*

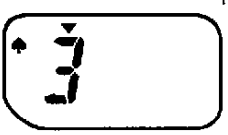
AUTO POWER OFF (APO)

After 2 hours elapse with no key entries or no call received, APO turns OFF the transceiver's power; however, 1 minute before the power turns OFF, a warning tone sounds (4 double beeps). When the power is turned OFF by APO, the display clears and the APO icon starts blinking. To turn the power back ON, press the **POWER** switch.

Turn the power OFF.

While pressing the **UP** key, turn the power ON.

- The APO icon appears.



To turn the APO function OFF, repeat the above steps.

Note: *After APO turns the power OFF, the amount of consumed power is slightly more than when you turn the power OFF manually.*

BEEP ON/OFF

The transceiver beeps each time you press a key. The beep volume depends on the position of the **VOL** control. You can also switch this Beep function OFF.

Turn the power OFF.

While pressing the **DOWN** key, turn the power ON.
- Upon releasing the keys, no beep sounds.

To switch the Beep function ON again, repeat the above steps. Upon releasing the keys in step 2, a beep sounds.

Note:

- *When using the optional SMC-34 speaker microphone, the beep volume depends on both the transceiver **VOL** control and the SMC-34 **VOLUME** control.*
- *While the Beep function is OFF, the following beeps or tones are still output from the speaker.*
  - *Battery voltage alarm {page 2}*
  - *Call tones {page 8}*
  - *Transmit Power Save alarm {page 17}*
  - *APO warning tone {page 20}*

MONITOR

The Monitor function unmutes the speaker in any situation. Use this function when received signals are too weak to recognize or when you want to adjust the volume while listening to background noise.

■ Using the Optional SMC-34 Mic

If you have connected the optional SMC-34 speaker microphone, you can use the Mic **1** key.

Press and hold the Mic **1** key.

- The Monitor function is active and the busy icon is visible while the key is being held.

Release the Mic **1** key to deactivate the function.

■ Not Using the Optional SMC-34 Mic

You also can activate and deactivate the Monitor function by using the following method.

Turn the power OFF.

While pressing the **DOWN** and **MODE** keys, turn the power ON.

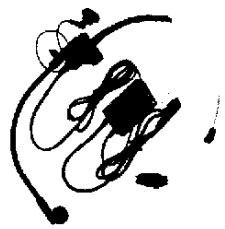
- The busy icon appears

To switch the function OFF, turn the power OFF.

OPTIONAL ACCESSORIES

SMC-34
Remote Control
Speaker Microphone

HMC-3
Headset



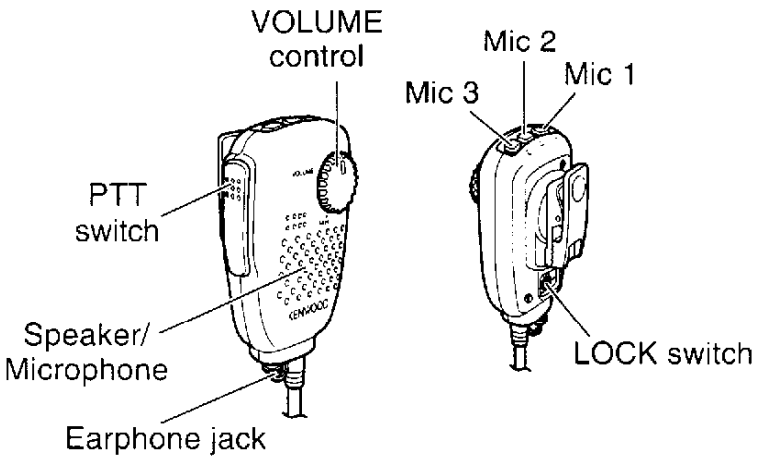
EMC-3
Clip Microphone
with Earphone

Note: *Using a headset or microphone accessory while driving may not be allowed in your area. Check with your local regulations.*

SMC-34 SPEAKER MICROPHONE

The SMC-34 gives you the following additional functions and features.

- Additional call tone {page 8}
- Channel Scan {page 14}
- Monitor function {page 22}
- External **PTT** switch
- External **VOLUME** control
- External speaker/ microphone



Note:

- *The **LOCK** switch locks the Mic **1**, Mic **2**, and Mic **3** keys OFF.*
- *The speaker volume depends on both the transceiver **VOL** control and the SMC-34 **VOLUME** control.*
- *The clip can be rotated.*

SMC-34 Mic Operation Summary

Transmit	Press and hold **PTT**.
Sending call tones {page 9}	Press and hold **PTT**, then press Mic **3**; or simply press Mic **3**.
Free channel scan start {page 15}	Press Mic **2** for more than **1** second, then press and hold **PTT**.
Free channel scan stop {page 15}	Press Mic **2** for a moment.
Busy channel scan start {page 15}	Press Mic **2** for more than 1 second.
Busy channel scan stop {page 15}	Press Mic **2** for a moment.
Monitor {page 22}	Press and hold Mic **1**.

POWER ON FUNCTIONS SUMMARY

Turn the transceiver's power OFF, then press the following key combinations.

Changing default call tone (**UP** key) {page 9}	▶ **PTT+UP+POWER**
Changing default call tone (**DOWN** key) {page 9}	▶ **PTT+DOWN+POWER**
Reset to original factory settings {page 16}	▶ **UP+DOWN+POWER**
Switching Transmit Power Save limit time {page 17}	▶ **PTT+MODE+POWER**
Key Lock {page 18}	▶ **MODE+POWER**
Light in display always ON {page 19}	▶ **MODE+UP+POWER**
Auto Power OFF {page 20}	▶ **UP+POWER**
Beep OFF {page 21}	▶ **DOWN+POWER**
Monitor always ON {page 23}	▶ **DOWN+MODE+POWER**

SPECIFICATIONS

Frequency range		462.5625 ~ 467.7125 MHz (14 channels)
Current	Transmit mode	330 mA or less
	Receive mode (90 mW output)	120 mA or less
	Receive mode (No signal)	50 mA or less
	Battery Save ON	Approx. 10 mA (average)
Supply voltage (rated voltage)		4.5 V
Transmit output power		300 mW
Dimensions (W x H x D, projections not included)		56 mm x 101 mm x 26 mm
Weight (with 3 AA batteries)		Approx. 180 g

FREQUENCY CHART

Ch	Freq. (MHz)	Ch	Freq. (MHz)	Ch	Freq. (MHz)
1	462.5625	6	462.6875	11	467.6375
2	462.5875	7	462.7125	12	467.6625
3	462.6125	8	467.5625	13	467.6875
4	462.6375	9	467.5875	14	467.7125
5	462.6625	10	467.6125		

NOTICES TO THE USER

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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.*