

# KENWOOD

TK-D240

TK-D240V

TK-D340

TK-D340U

USER GUIDE

GUIDE DE L'UTILISATEUR

GUÍA DEL USUARIO



JVCKENWOOD Corporation

B5A-0929-00 (K)





VHF DIGITAL TRANSCEIVER

# TK-D240

UHF DIGITAL TRANSCEIVER

# TK-D340

## USER GUIDE

This User Guide covers only the basic operations of your radio. Ask your dealer for information on any customized features they may have added to your radio. For using details instruction manual (User Manual), refer to the following URL.



[http://manual2.jvckenwood.com/en\\_contents/search/](http://manual2.jvckenwood.com/en_contents/search/)

# THANK YOU

We are grateful you have chosen **KENWOOD** for your Digital Transceiver applications.

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## NOTICES TO THE USER

- ◆ Government law prohibits the operation of unlicensed radi transmitters within the territories under government control.
- ◆ Illegal operation is punishable by fi ne and/or imprisonment.
- ◆ 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.

**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 by the party responsible/ JVC KENWOOD. 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.

The AMBE+2™ voice coding Technology embodied in this product is protected by intellectual property rights including patent rights, copyrights and trade secrets of Digital Voice Systems, Inc. This voice coding Technology is licensed solely for use within this Communications Equipment. The user of this Technology is explicitly prohibited from attempting to extract, remove, decompile, reverse engineer, or disassemble the Object Code, or in any other way convert the Object Code into a human-readable form. U.S. Patent Nos. #6,199,037, #6,912,495, #8,200,497, #7,970,606, and #8,359,197

#### **Firmware Copyrights**

The title to and ownership of copyrights for firmware embedded in KENWOOD product memories are reserved for JVC KENWOOD Corporation.



#### **ATTENTION:**

The RBRC Recycle seal found on **KENWOOD** lithium-ion (Li-ion) battery packs indicates **KENWOOD's** voluntary participation in an industry program to collect and recycle Li-ion batteries after their operating life has expired. The RBRC program is an alternative to disposing Li-ion batteries with your regular refuse or in municipal waste streams, which is illegal in some areas.

For information on Li-ion battery recycling in your area, call (toll free) 1-800-8-BATTERY (1-800-822-8837).

**KENWOOD's** involvement in this program is part of our commitment to preserve our environment and conserve our natural resources.

## PRECAUTIONS

- Do not charge the transceiver and battery pack when they are wet.
- Ensure that there are no metallic items located between the transceiver and the battery pack.
- Do not use options not specified by **KENWOOD**.
- If the die-cast chassis or other transceiver part is damaged, do not touch the damaged parts.
- If a headset or headphone is connected to the transceiver, reduce the transceiver volume. Pay attention to the volume level when turning the squelch off.
- Do not place the microphone cable around your neck while near machinery that may catch the cable.
- Do not place the transceiver on unstable surfaces.
- Ensure that the end of the antenna does not touch your eyes.
- When the transceiver is used for transmission for many hours, the radiator and chassis will become hot. Do not touch these locations when replacing the battery pack.
- Do not immerse the transceiver in water.
- Always switch the transceiver power off before installing optional accessories.
- The charger is the device that disconnects the unit from the AC mains line. The AC plug should be readily accessible.



### WARNING

Turn the transceiver power off in the following locations:

- In explosive atmospheres (inflammable gas, dust particles, metallic powders, grain powders, etc.).
- While taking on fuel or while parked at gasoline service stations.
- Near explosives or blasting sites.
- In aircraft. (Any use of the transceiver must follow the instructions and regulations provided by the airline crew.)
- Where restrictions or warnings are posted regarding the use of radio devices, including but not limited to medical facilities.
- Near persons using pacemakers.

**CAUTION**

- Do not disassemble or modify the transceiver for any reason.
- Do not place the transceiver on or near airbag equipment while the vehicle is running. When the airbag inflates, the transceiver may be ejected and strike the driver or passengers.
- Do not transmit while touching the antenna terminal or if any metallic parts are exposed from the antenna covering. Transmitting at such a time may result in a high-frequency burn.
- If an abnormal odor or smoke is detected coming from the transceiver, switch the transceiver power off immediately, remove the battery pack from the transceiver, and contact your **KENWOOD** dealer.
- Use of the transceiver while you are driving may be against traffic laws. Please check and observe the vehicle regulations in your area.
- Do not expose the transceiver to extremely hot or cold conditions.
- Do not carry the battery pack (or battery case) with metal objects, as they may short the battery terminals.
- Danger of explosion if the battery is incorrectly replaced; replace only with the same type.
- When attaching a commercial strap to the transceiver, ensure that the strap is durable. In addition, do not swing the transceiver around by the strap; you may inadvertently strike and injure another person with the transceiver.
- If a commercially available neck strap is used, take care not to let the strap get caught on nearby machine.
- When operating the transceiver in areas where the air is dry, it is easy to build up an electric charge (static electricity). When using an earphone accessory in such conditions, it is possible for the transceiver to send an electric shock through the earphone and to your ear. We recommend you use only a speaker/microphone in these conditions, to avoid electric shocks.
- To dispose of batteries, be sure to comply with the laws and regulations in your country or region.



## Information concerning the battery pack:

The battery pack includes flammable objects such as organic solvent. Mishandling may cause the battery to rupture producing flames or extreme heat, deteriorate, or cause other forms of damage to the battery. Please observe the following prohibitive matters.



**DANGER**

- **Do not disassemble or reconstruct battery!**

The battery pack has a safety function and protection circuit to avoid danger. If they suffer serious damage, the battery may generate heat or smoke, rupture, or burst into flame.

- **Do not short-circuit the battery!**

Do not join the + and – terminals using any form of metal (such as a paper clip or wire). Do not carry or store the battery pack in containers holding metal objects (such as wires, chain-necklaces or hairpins). If the battery pack is short-circuited, excessive current will flow and the battery may generate heat or smoke, rupture, or burst into flame. It will also cause metal objects to heat up.

- **Do not incinerate or apply heat to the battery!**

If the insulator is melted, the gas release vent or safety function is damaged, or the electrolyte is ignited, the battery may generate heat or smoke, rupture, or burst into flame.

- **Do not leave the battery near fire, stoves, or other heat generators (areas reaching over 80°C/ 176°F)!**

If the polymer separator is melted due to high temperature, an internal short-circuit may occur in the individual cells and the battery may generate heat or smoke, rupture, or burst into flame.

- **Do not immerse the battery in water or get it wet by other means!**

If the battery's protection circuit is damaged, the battery may charge at extreme current (or voltage) and an abnormal chemical reaction may occur. The battery may generate heat or smoke, rupture, or burst into flame.

- **Do not charge the battery near fire or under direct sunlight!**

If the battery's protection circuit is damaged, the battery may charge at extreme current (or voltage) and an abnormal chemical reaction may occur. The battery may generate heat or smoke, rupture, or burst into flame.

**DANGER**

- **Use only the specified charger and observe charging requirements!**

If the battery is charged in unspecified conditions (under high temperature over the regulated value, excessive high voltage or current over regulated value, or with a remodeled charger), it may overcharge or an abnormal chemical reaction may occur. The battery may generate heat or smoke, rupture, or burst into flame.

- **Do not pierce the battery with any object, strike it with an instrument, or step on it!**

This may break or deform the battery, causing a short-circuit. The battery may generate heat or smoke, rupture, or burst into flame.

- **Do not jar or throw the battery!**

An impact may cause the battery to leak, generate heat or smoke, rupture, and/or burst into flame. If the battery's protection circuit is damaged, the battery may charge at an abnormal current (or voltage), and an abnormal chemical reaction may occur. The battery may generate heat or smoke, rupture, or burst into flame.

- **Do not use the battery pack if it is damaged in any way!**

The battery may generate heat or smoke, rupture, or burst into flame.

- **Do not solder directly onto the battery!**

If the insulator is melted or the gas release vent or safety function is damaged, the battery may generate heat or smoke, rupture, or burst into flame.

- **Do not reverse the battery polarity (and terminals)!**

When charging a reversed battery, an abnormal chemical reaction may occur. In some cases, an unexpected large amount of current may flow upon discharging. The battery may generate heat or smoke, rupture, or burst into flame.

- **Do not reverse-charge or reverse-connect the battery!**

The battery pack has positive and negative poles. If the battery pack does not smoothly connect with a charger or operating equipment, do not force it; check the polarity of the battery. If the battery pack is reverse-connected to the charger, it will be reverse-charged and an abnormal chemical reaction may occur. The battery may generate heat or smoke, rupture, or burst into flame.

**DANGER**

- **Do not touch a ruptured and leaking battery!**

If the electrolyte liquid from the battery gets into your eyes, wash your eyes with fresh water as soon as possible, without rubbing your eyes. Go to the hospital immediately. If left untreated, it may cause eye-problems.

**WARNING**

- **Do not charge the battery for longer than the specified time!**

If the battery pack has not finished charging even after the regulated time has passed, stop it. The battery may generate heat or smoke, rupture, or burst into flame.

- **Do not place the battery pack into a microwave or high pressure container!**

The battery may generate heat or smoke, rupture, or burst into flame.

- **Keep ruptured and leaking battery packs away from fire!**

If the battery pack is leaking (or the battery emits a bad odor), immediately remove it from flammable areas. Electrolyte leaking from battery can easily catch on fire and may cause the battery to generate smoke or burst into flame.

- **Do not use an abnormal battery!**

If the battery pack emits a bad odor, appears to have different coloring, is deformed, or seems abnormal for any other reason, remove it from the charger or operating equipment and do not use it. The battery may generate heat or smoke, rupture, or burst into flame.

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## UNPACKING AND CHECKING EQUIPMENT

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Carefully unpack the transceiver. If any of the items listed below are missing or damaged, file a claim with the carrier immediately.

### SUPPLIED ACCESSORIES

- Antenna ..... 1
- Battery charger/ AC adapter (KSC-35S) ..... 1
- Li-ion Battery pack (KNB-45L)..... 1
- Speaker/ microphone jack cover ..... 1
- Speaker/ microphone locking bracket..... 1
- Belt clip (KBH-10) ..... 1
- Screw (M3 x 8 mm) ..... 2
- Channel stopper ..... 1
- Instruction manual ..... 1

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#### Note:

- ◆ Refer to “PREPARATION” starting on page 11 for accessory installation instructions.
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## PREPARATION

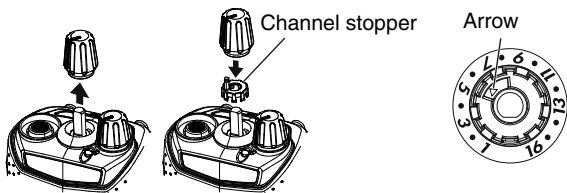
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### INSTALLING THE CHANNEL STOPPER

You can set the channel stopper position for channels 2, 4, 6, 8, 10, 12, and 14. Inserting the Channel stopper prevents unnecessarily selecting channels which do not exist.

- Selecting a channel which does not exist causes a continuous error tone to sound.
- 1 Set the Channel selector to channel 1, then pull the Channel selector knob off the transceiver.
    - If the Channel selector is not positioned at channel 1, the knob may not install correctly and the channel may be unable to change.
  - 2 Insert the channel stopper.
  - 3 Set the arrow of the Channel stopper to the highest channel number for the transceiver.
  - 4 Reinsert the Channel selector knob.



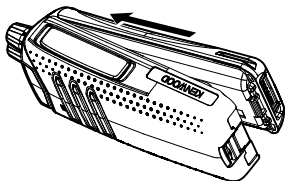
## INSTALLING/ REMOVING THE BATTERY PACK

The battery pack is not charged at the factory; charge it before use.

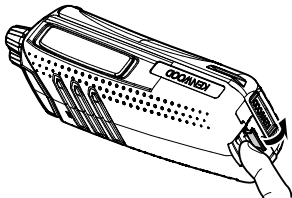


### CAUTION

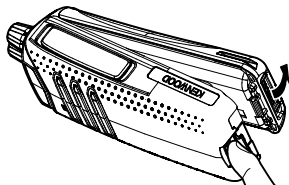
- ◆ Do not short the battery terminals or dispose of the battery by fire.
- ◆ Never attempt to remove the casing from the battery pack.



- 1 Align the battery pack with the back of the transceiver, then press the battery pack and transceiver firmly together until the release latch on the base of the transceiver locks.



- 2 To remove the battery pack, lift the safety catch on the base of the transceiver, then press the release latch underneath the safety catch.



- 3 While pressing the release latch, pull the battery pack away from the transceiver.

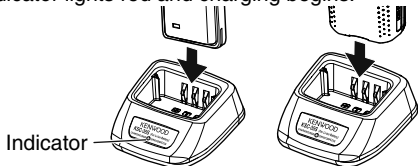
# CHARGING THE BATTERY PACK

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## ATTENTION:

- ◆ Always switch OFF a transceiver equipped with a battery pack before inserting the transceiver into the charger.
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- 1 Plug the AC adapter cable into the jack located on the rear of the charger.
- 2 Plug the AC adapter into an AC outlet.
- 3 Slide a battery pack or a transceiver equipped with a battery pack into the charging slot of the charger.
  - Make sure the metal contacts of the battery pack mate securely with the charger terminals.
  - The indicator lights red and charging begins.



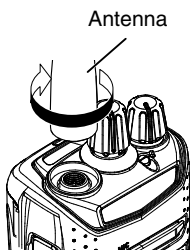
- 4 When charging is completed, the indicator lights green. Remove the battery pack or the transceiver from the charging slot of the charger.
    - It takes approximately 3 hours to charge the battery pack.
    - When the charger will not be used for a long time, unplug the AC adapter from the AC outlet.
- 

## Note:

- ◆ When the indicator blinks red, the battery pack is either defective or the battery pack contacts are not properly mated with those of the charger.
- ◆ When the indicator flashes green and orange, the battery pack has not satisfied the charging start temperature. Remove the battery pack from the charger and wait until it reaches a normal temperature before charging it again.
- ◆ The ambient temperature should be between 41°F and 104°F (5°C and 40°C) while charging is in progress. Charging outside this range may not fully charge the battery.

- ◆ The battery pack life is over when its operating time decreases even though it is fully and correctly charged. Replace the battery pack.

## INSTALLING THE ANTENNA



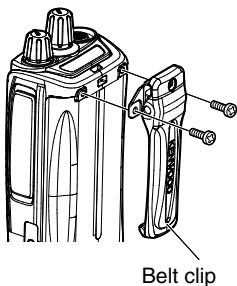
Antenna

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

### Note:

- ◆ The antenna is neither a handle, a key ring retainer, nor a speaker/ microphone attachment point. Using the antenna in these ways may damage the antenna and degrade your transceiver's performance. la fixer correctement en place.

## INSTALLING THE BELT CLIP



Belt clip

If necessary, attach the belt clip using the two supplied M3 x 8 mm screws.

### Note:

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



### CAUTION

- ◆ Do not use glue which is designed to prevent screw loosening when installing the belt clip, as it may cause damage to the transceiver. Acrylic ester, which is contained in these glues, may crack the transceiver's back panel.



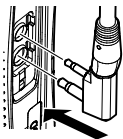
## INSTALLING THE CAP OVER THE SPEAKER/ MICROPHONE JACKS

Install the cap over the speaker/ microphone jacks when not using an optional speaker/ microphone or headset.

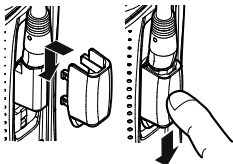
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### Note:

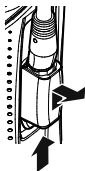
- ◆ To keep the transceiver water resistant, you must cover the speaker/ microphone jacks with the supplied cap.
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- 1 Insert the speaker/ microphone (or headset) plugs into the speaker/ microphone jacks of the transceiver.



- 2 Place the locking bracket over the speaker/ microphone (or headset) plugs so that the locking tabs insert into the transceiver grooves.
  - Push down on the locking bracket to slide it into place.



- 3 While holding the locking bracket in place, push it towards the bottom of the transceiver until the tabs on the bracket click into place.
  - To remove the locking bracket, push the bracket up from the base.

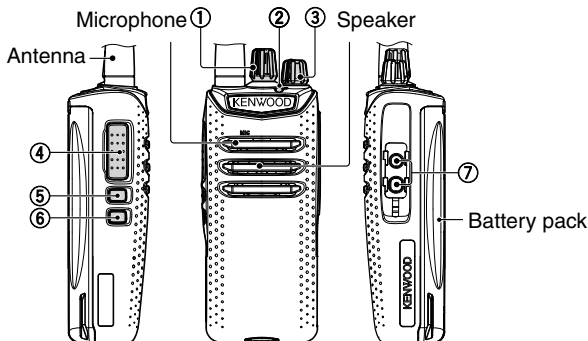
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## ORIENTATION

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- ① **Selector**  
Rotate to change the operating channel.
- ② **LED indicator**  
For the LED indicator status, refer to page 18.
- ③ **Power switch/ Volume control**  
Turn clockwise to switch ON the transceiver. To switch OFF the transceiver, turn counterclockwise until a click sounds. Rotate to adjust the volume level.
- ④ **PTT (Push to Talk) switch**  
Press and hold, then speak into the microphone to transmit.
- ⑤ **Side 1 key**  
Press to activate its programmable function.
- ⑥ **Side 2 key**  
Press to activate its programmable function.
- ⑦ **Speaker/ microphone jacks**  
Insert the Speaker/ microphone or Headset plug into this jack.

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## BASIC OPERATIONS

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### SWITCHING POWER ON/OFF

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

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

### ADJUSTING THE VOLUME

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

### SELECTING A ZONE AND CHANNEL

- 1 Select the desired zone using the key programmed as **[Zone Up]** or **[Zone Down]**.
  - Each zone contains a group of channels.
- 2 Select the desired channel using the **Selector** knob (default).
  - Each channel is programmed with settings for transmitting and receiving.

### TRANSMITTING

- 1 Select the desired zone and channel.
- 2 Press the key programmed as **[Monitor]** or **[Squelch Off]** to check whether or not the channel is free.
  - If the channel is busy, wait until it becomes free.
- 3 Press the **PTT** switch and speak into the microphone. Release the **PTT** switch to receive.
  - For best sound quality, hold the transceiver approximately 1.5 inches (3 ~ 4 cm) from your mouth.

## RECEIVING

Select the desired zone and channel. If signaling has been programmed on the selected channel, you will hear a call only if the received signal matches your transceiver settings.

### Receiving Group Calls

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

### Receiving Individual Calls

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

## LED INDICATOR STATUS

| Indicator Color         | Meaning  |
|-------------------------|--|
| Lights red              | Transmitting   |
| Lights green            | Receiving a call   |
| Blinks red              | Battery power is low while transmitting                          |
| Blinks green            | Scanning   |
| Blinks orange or blue * | Receiving an encoded call (signaling, etc.)                      |
| Blinks red/orange       | The selected channel has not been programmed and cannot be used. |

\* Your dealer can set the LED to blink either orange or blue for Transceiver operation.

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# KENWOOD

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## RADIO FREQUENCY ENERGY SAFETY INFORMATION

This **KENWOOD** transceiver has been tested and complies with the standards listed below, in regards to Radio Frequency (RF) energy and electromagnetic energy (EME) generated by the transceiver.

- FCC RF exposure limits for *Occupational Use Only*. RF Exposure limits adopted by the FCC are generally based on recommendations from the National Council on Radiation Protection and Measurements, & the American National Standards Institute.
- FCC OET Bulletin 65 Edition 97-01 Supplement C
- American National Standards Institute (C95.1 – 1992)
- American National Standards Institute (C95.3 – 1992)

### WARNING

This **KENWOOD** transceiver generates RF EME while transmitting. RF EME (Radio Frequency Electric & Magnetic Energy) has the potential to cause slight thermal, or heating effects to any part of your body less than the recommended distance from this radio transmitter's antenna. RF energy exposure is determined primarily by the distance to and the power of the transmitting device. In general, RF exposure is minimized when the lowest possible power is used or transmission time is kept to the minimum required for consistent communications, and the greatest distance possible from the antenna to the body is maintained. The transceiver has been designed for and is classified for *Occupational Use Only*. Occupational/ controlled exposure limits are applicable to situations in which persons are exposed to RF energy as a consequence of their employment, and such persons have been made aware of the potential for exposure and can exercise control over their exposure. This means you can use the transceiver only if you are aware of the potential hazards of operating a transceiver and are familiar in ways to minimize these hazards. This transceiver is not intended for use by the general public in uncontrolled environments. Uncontrolled environment exposure limits are applicable to situations in which the general public may be exposed to RF energy, or in which the persons who are exposed as a consequence of their employment may not be fully aware of the potential for exposure or cannot exercise control over their exposure.

The following list provides you with the information required to ensure that you are aware of RF exposure and of how to operate this transceiver so that the FCC RF exposure limitations are not exceeded.

- While transmitting (holding the **PTT** switch or speaking with **VOX** enabled), always keep the antenna and the radio at least 3 cm (1 3/16 inches) from your body or face, as well as from any bystanders. A LED on the top of the radio shows red when the transmitter is operating in both **PTT** and **VOX** modes.
- Do not transmit for more than 50% of the total transceiver use time; transmitting over 50% of the total use time may exceed the limits in accordance to the FCC RF exposure requirements. Nominal transceiver operation is 5% transmission time, 5% reception time, and 90% stand-by time.
- Use only the specified antenna for this transceiver; this may be either the antenna provided with the transceiver or another antenna authorized by **KENWOOD**.

Use only **KENWOOD** authorized accessories (antennas, battery packs, belt clips, Speaker/ Mics or headsets etc.): When worn on the body, always place the radio in a **KENWOOD** recommended clip or carrying case meant for this product. The use of other than recommended or approved body- worn accessories may result in RF exposure levels which exceed the FCC's occupational/ controlled environment RF exposure limits.

### CAUTION

To ensure that your exposure to RF EME is within the FCC limits for occupational use, you must observe and adhere to the above points.

## Electromagnetic Interference Compatibility

Electronic devices are susceptible to electromagnetic interference (EMI) if they are not adequately shielded or designed for electromagnetic compatibility. Because this transceiver generates RF energy, it can cause interference to such equipment.

- Turn OFF your transceiver where signs are posted to do so. Hospitals and health care facilities use equipment that is sensitive to electromagnetic radiation.
- Turn OFF your transceiver while on board an aircraft when so instructed. Use of the transceiver must be in accordance with airline regulations and/or crew instructions.

B59-2687-00