# INSTRUCTION MANUAL

# **THANK YOU!**

We are grateful you chose **KENWOOD** for your land mobile radio applications. We believe this easy-to-use transceiver will provide dependable communications to keep personnel operating at peak efficiency. **KENWOOD** transceivers incorporate the latest in advanced technology. As a result, we feel strongly that you will

be pleased with the quality and features of this product.

# MODELS COVERED BY THIS MANUAL

The models listed below are covered by this

• TK-7150: VHF FM Transceiver • TK-8150: 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 AND /OR INPRISONMENT.

REFER SERVICE TO QUALIFIED TECHNICIANS ONLY.

#### SAFETY:

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

#### **WARNING:**

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

Turn off your transceiver while taking on fuel, or while parked in gasoline service stations. 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 either touching the antenna or standing within two to three feet of it, to avoid the possibility of radio frequency burns or related physical injury.

#### DYNAMITE BLASTING CAPS

Operating the transceiver within 500 feet (150m) of dynamite blasting caps may cause them to explode. Turn OFF your transceiver when in an area where blasting is in progress, or where "TURN OFF TWO-WAY RADIO" signs have been posted. If you are transporting blasting caps in your vehicle, make sure they are carried in a closed metal box with a padded interior. Do not transmit while the caps are being placed into or removed from the container.

#### **PRECAUTIONS**

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

- . Do not attempt to configure the transceiver while driving, it is too dangerous.
- . Do not modify the transceiver for any reason.
- . Do not expose the transceiver to long periods of direct sunlight, nor place it near heating appliances.
- . Do not place the transceiver in excessively dusty, humid, or wet areas, nor on unstable surfaces.
- . If an abnormal odor or smoke is detected coming from the transceiver, turn OFF the power immediately. Contact your **KENWOOD** dealer.

#### **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.

# UNPACKING AND CHECKING EQUIPMENT

**Note:** The following unpacking instructions are for use by your

**KENWOOD** dealer, an authorized **KENWOOD** service facility, or the factory.

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

#### **Supplied Accessories**

Itom	D (N. I	Quantity
Item	Part Number	K
Instruction Manual	B62-×××-××	1
DC power cable	E30-×××-××	1
Fuse	F15-×××-××	1
Mounting bracket	J29-×××-××	1
Screw Set	N99-×××-××	1

## **PREPARATION**

#### **WARNING**

Various electronic equipment in your vehicle may malfunction if they are not properly protected from radio frequency nergy.

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 that make of vehicle and enlist their aid in determining if the equipment will perform while transmitting.

**Note**: The following preparation instructions are for use by your **KENWOOD** dealer, an authorized **KENWOOD** servise 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:

- 6mm (1/4 inch) or larger electriic drill
- 4.2mm (5/32 inch) drill bit for the self-tapping screws
- Circle cutters

#### POWER CABLE CONNECTION

#### **CAUTION**

The transceiver operates in 12V negative ground systems only! Check the battery polarity and voltage of the vehicle before installing 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 firewall 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 a cable tie.
- 5 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.

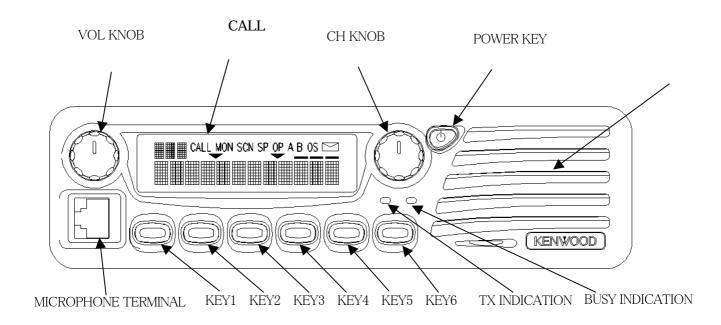
- 1 Mark the position of the holes in the dash by using the mounting bracket as a templete. Drill the holes, then attach the mounting bracket using the supplied self-tapping screws.
- Be sure to mount the transceiver in a location where the controls are within easy reach of the user and where there is sufficient space at the rear of the transceiver for cable connections and ventilation.
- 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-head and ventilation. screws.
- 4 Mount the microphone hanger 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.

#### **CAUTION**

When replacing the fuse in the DC power cable, be sure to replace it with a fuse of the same value. Never replace a fuse with a fuse that has a higher value.

# **GETTING ACQUAINTED**

# **ORIENTATION**



# Functional and Operational specifications

# 1) Front Panel

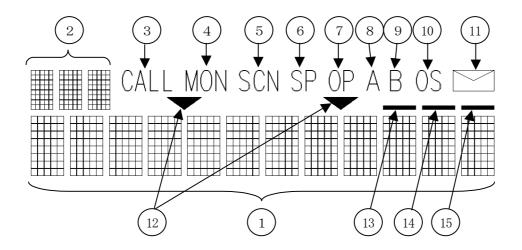
1) Knob (Rotary type)

NO.	Name	Description	
1	VOL	Adjust RX Volume, Alert tones and Public Address Level	
2	СН	Programmable Up/Down Default:Channel /GID Up/Down	
3	РО	Power key (Push type)	
4	MIC	Microphone Terminal	
5	KEY	Key 1 to Key 6 (Push type)	
6	TX IND	TX Indication	
7	BUSY	BUSY Indication	
8	CALL	Call display	
9	SP	Speaker display	

2) Switch (Push type)

No.	Name	Description	
1	POWER	Power ON/OFF	
2	KEY1	Programmable	Default: : Zone Up
3	KEY2	Programmable	Default: Zone Down
4	KEY3	Programmable	Default: None

# 3) DISPLAY LCD



NO.	Name	Description		
1		Alphanumeric display Channel/GID display Zone display		
2		Channel/GID display Zone display		
3	CALL	Call display		
4	MON	Monitor ON display		
5	SCN	Monitor ON display		
6	SP	Speaker B display		
7	OP	Option ON display		
8	A	AUX A display		
9	В	AUX B display		
1 0	OS	Operator selectable tone display		
1 1		Message display		
1 2		ADD display		
1 3	-	Not used		
1 4	-	Not used		
1 5	-	Not used		

# **OPERATING BASICS**

# **Switching Power ON/OFF**

Press the switch to switch the transceiver ON.

Press and hold the switch for approximately 1 second to switch the transceiver OFF.

# Adjusting the Volume

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

## **Selecting a Channel**

Rotate the **Channel selector** to select a channel.

Clockwise increases the channel number and counterclockwise decreases it.

#### **Transmitting**

Note: Before transmitting, first monitor the channel to make sure it is not already in use.

- 1 Select your desired channel.
  - · If the channel is busy, wait until it becomes free.
- 2 Press the microphone **PTT** switch and speak into the microphone. Release the **PTT** switch when you have finished speaking.
  - For best sound quality at the receiving station, hold the microphone approximately 1.5 inches (3~4cm) from your mouth.

#### Receiving

- 1 Select your desired channel.
- 2 When you hear a signal, readjust the volume level if necessary.
- 3 Respond to the call as described in step 2 of "TRANSMITTING", above.

## **AUXILIARY FEATURES**

# Time-out Timer (TOT)

The purpose of the Time-out Timer is to prevent any caller from using a channel for an extended period of time. If you continuously transmit for a period of time that exceeds the programmed time, the transceiver will stop transmitting and an alert tone will sound. To stop the tone, release the **PTT** switch.

Your dealer can program a warning function to alert you before the TOT expires. Continuously transmitting for the time specified by your dealer will cause the warning tone to sound.