

VHF REPEATER/UHF REPEATER

TKR-720/820

INSTRUCTION MANUAL

KENWOOD

KENWOOD CORPORATION

FCC ID: ALHTKR-820N-2
2.983 (d) (8) MANUAL
1033 (c) (3)

©PRINTED IN JAPAN B62-0066-101K, M/M/C
93/12 11 10 9 8 7 6 5 4 3 2 1 92/12 10 9 8 7 6 5 4

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.

WARNING
To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

BEFORE OPERATION

IMPORTANT
GOVERNMENT LAW PROHIBITS THE OPERATION OF UNLICENSED RADIO TRANSMITTERS WITHIN THE TERRITORIES UNDER GOVERNMENT CONTROL. ILLEGAL OPERATION IS PUNISHABLE BY FINE OR IMPRISONMENT OR BOTH. REFER SERVICE TO A QUALIFIED LICENSED OR CERTIFIED TECHNICIAN ONLY.

Please read this instruction manual carefully before placing your Repeater in service.
SAVE THIS INSTRUCTION MANUAL.

WARNING
To prevent electric shock, fire and other injury, please note the followings:
To ensure good ventilation, do not put anything on top of the cabinet.
To avoid risk of electric shock, under no circumstances should the unit be opened.
If an abnormal smell or smoke is detected, immediately turn the power off and pull out the power plug. Contact the KENWOOD service station or your dealer.

INSTALLATION

Please consult your dealer for installation of the repeater and antenna.

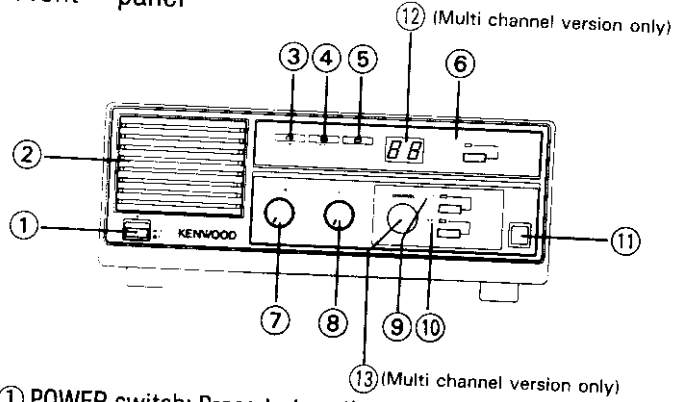
CAUTION
Do not place the unit, where it will be exposed to direct sunlight or close to heating appliance.
Do not place the unit in areas of excessive dust, high humidity or on unstable surfaces.
The following installation instructions are for use by KENWOOD service facility only.

Carefully unpack the repeater. It is recommended that you identify the items listed and check them off before discarding the packing material. If any damage has occurred to the equipment during shipment, file a claim with the carrier immediately.

Equipment	
Repeater	1 ea.
Fuse (3A) (for 120V)	F06-3024-05 1 ea.
or	
Fuse (1.6A) (for 220V)	F05-1623-05 1 ea.
Fuse(10A) (for TKR-820 Multi channel version only)	F51-0016-05 1 ea.
Fuse(15A) (for TKR-720 Multi channel version only)	F51-0017-05 1 ea.
Coax. Cable (TKR-820 only)	E31-3391-05 1 ea.
Power cable Ass'y (Multi channel version only)	E30-2076-15 1 ea.
Duplexer Bracket (TKR-820 only)	J21-4248-04 2 ea.
Machine screw (TKR-820 only)	N09-0704-05 10 ea.
Warranty card (U.S.A. only)	1 copy
Instruction manual	B62-0066-×× 1 sheet

CONTROLS and FUNCTIONS

Front panel



- ① POWER switch: Press to turn the unit ON.
- ② SPEAKER: Front mounted for best sound quality.
- ③ POWER indicator: Lights when the unit is turned ON.
- ④ BUSY indicator: ON when channel is in use.
- ⑤ TX indicator: Glows during transmit.
- ⑥ TAKE OVER switch and indicator: (with dealer optional remote controller) Press this switch when you will take over control from the remote controller, if so equipped.
- ⑦ VOL control: Turn to about the 12 o'clock position.
- ⑧ SQL (Squelch) control: Squelch is activated when the control is rotated clockwise. Further rotation sets threshold level. This control does not determine repeater trigger level.

REPEAT switch and indicator: Press this switch for repeater operation and the indicator light. Leave out the switch for full duplex transceiver operation.

MONI (monitor) switch and indicator:

Defeats signaling decoder in the full duplex transceiver mode, allowing the operator to check for traffic on the channel before transmitting. The indicator lights when the MONI switch is pressed.

Microphone Input Receptacle

CHANNEL indicator (Multi channel version only)

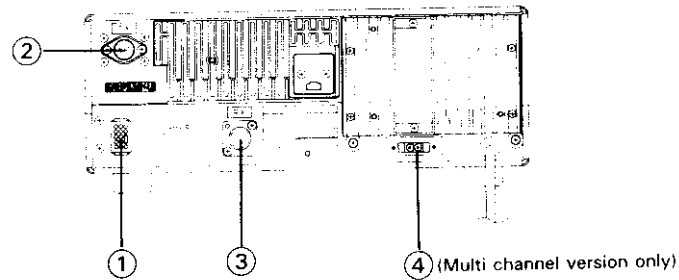
Lights when the radio is turned ON, and indicates operating channel number.

CHANNEL selector (Multi channel version only)

Rotary control knob for channel selection.

Front panel

FR-720



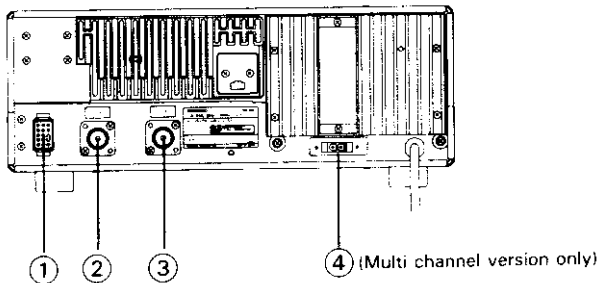
1 Accessory connector

2 TX antenna connector

3 RX/Duplexer antenna connector

4 DC input connector (Multi channel version only)

FR-820



1 Accessory connector

2 TX/Duplexer antenna connector

3 RX antenna connector

4 DC input connector (Multi channel version only)

REPEATER OPERATION

Turn the unit ON by pressing the POWER switch.

Press the REPEAT switch to turn the indicator ON. The unit transmits and transfers message from stations in your own system automatically.

The TX light will light during transmission. You will be able to hear messages being transferred by turning the VOLUME control clockwise, if necessary.

TRANSCIVER OPERATION

RECEIVE

Switch the unit ON by pressing the POWER switch ON.

Next, leave out the REPEAT switch to turn the REPEAT indicator OFF, and adjust the volume and squelch

NOTE

If your radio is programmed with QT or DQT signaling, there will be virtually no noise coming from the speaker, even at full volume setting. You will hear transmissions being made by other radios IN YOUR SYSTEM ONLY!

If your radio is NOT PROGRAMMED with QT or DQT, you will hear ALL TRANSMISSIONS being made by any stations using the channel, or if no one is using the channel, the radio will remain quiet.

To adjust the volume, depress the MONI switch, which defeats the QT system (if so programmed), and allows you to hear all activity on the channel. Set the volume control for a comfortable listening level, and again depress the MONI switch, allowing it to return to the OFF position for normal operation.

With the MONI switch in the OFF position, QT system programmed radios will ignore transmissions from stations other than those in your system.

Radios not programmed with QT will receive all transmissions occurring on the channel, even those from stations outside your own system.

At the first reception of a message from your dispatcher or another vehicle in your fleet, you may wish to make a minor adjustment of your volume control.

TRANSMIT

Calling another station on your KENWOOD radio is very simple:

First, listen for a few seconds to make certain the channel is not being used. The monitor switch may be depressed to check for activity on the channel.

Squeeze the TRANSMIT switch and speak in your normal speaking voice. FCC regulations require that you identify the station you are calling, and your station.

The TX light will light during transmission. When you are through speaking, release the TRANSMIT switch, and you are automatically back in the receive mode.

MICROPHONE

Plug the KENWOOD KMC-9 optional Microphone into the Microphone Input Receptacle on the front panel.

