



DIGITAL TRANSCEIVER

NX-x00 series  
NX-x20 series  
NX-x40 series  
TK-5x20 series

USER GUIDE

This User guide covers only the basic operations of your radio. For using details instruction manual, refer to the following URL or QR code.  
<http://manual.kenwood.com/files/B5K-0418-00.pdf>



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

JVCKENWOOD Corporation

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 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.

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**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 standing near to or touching the antenna, to avoid the possibility of radio frequency burns or related physical injury.
- DYNAMITE BLASTING CAPS**  
Operating the transceiver within 500 feet (150 m) 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.

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.

PRECAUTIONS

- 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 disassemble or modify the transceiver for any reason.
  - Do not expose the transceiver to long periods of direct sunlight, nor place it near heating appliances.
  - If an abnormal odor or smoke is detected coming from the transceiver, switch the transceiver power off immediately, 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 use options not specified by **KENWOOD**.

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**CAUTION**

- The transceiver operates in 12 V negative ground systems only! Check the battery polarity and voltage of the vehicle before installing the transceiver.
- Use only the supplied DC power cable or a KENWOOD optional DC power cable.
- Do not cut and/or remove the fuse holder on the DC power cable.

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**WARNING**

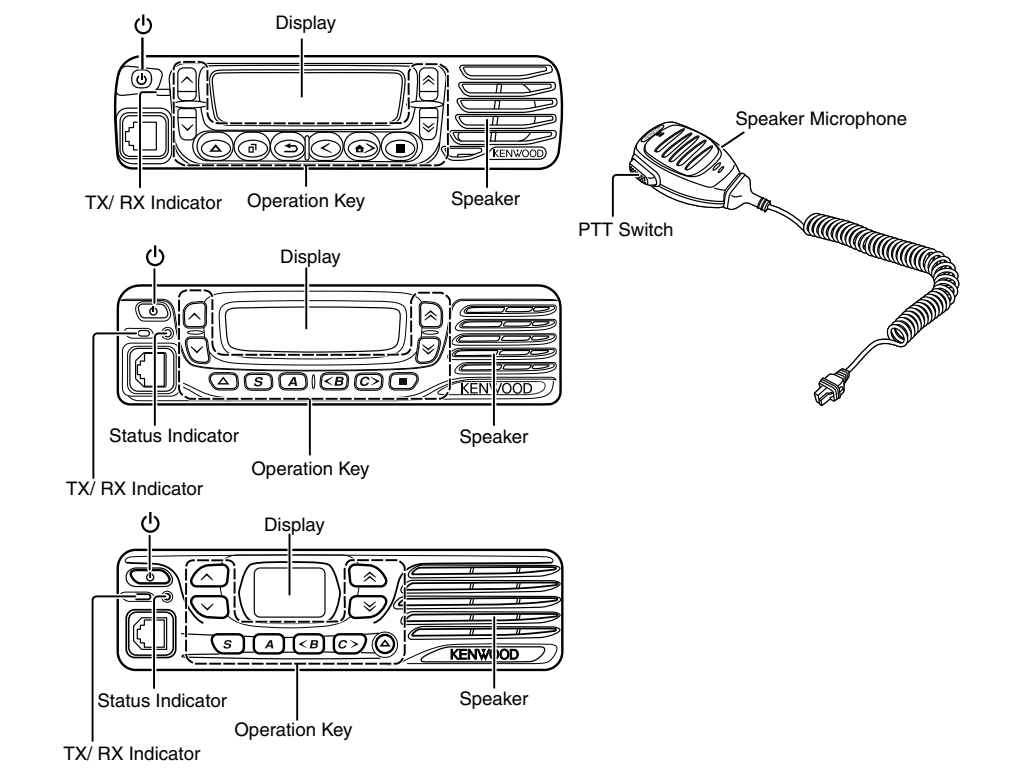
For passenger safety, install the transceiver securely using the supplied mounting bracket and screw set so the transceiver will not break loose in the event of a collision.

SUPPLIED ACCESSORIES

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

| Item                                                      | NX-x00 series<br>TK-5x20 series | NX-x20 series | NX-x40 series |
|-----------------------------------------------------------|---------------------------------|---------------|---------------|
| DC power cable                                            | 1                               | 1             | 1             |
| • Fuse (15 A)                                             | 2                               | 2             | 2             |
| Mounting bracket                                          | 1                               | 1             | 1             |
| Microphone (with cable)                                   | 1                               | 1             | 1             |
| Microphone hanger<br>(with 4 x 16 mm self-tapping screws) | 1                               | 1             | 1             |
| Screw set:                                                |                                 |               |               |
| • 5 x 16 mm self-tapping screw                            | 4                               | 4             | 4             |
| • Hex-headed screw with washer                            | 4                               | 4             | 4             |
| • Spring washer                                           | 4                               | 4             | 4             |
| • Flat washer                                             | 4                               | 4             | 4             |
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BASIC OPERATION



SWITCHING POWER ON/OFF

Press [ ] to switch the transceiver ON.  
Press [ ] again to switch the transceiver OFF.

ADJUSTING THE VOLUME

Press the [Volume Up] key to increase the volume. Press the [Volume Down] key to decrease the volume.

SELECTING A ZONE AND CHANNEL/GROUP ID

Select the desired zone using the keys programmed as **Zone Up/ Zone Down**.  
Each zone contains a group of channels.  
Select the desired channel/group ID using the keys programmed as **CH/GID Up / CH/GID Down**.  
Each channel/group ID is programmed with settings for transmitting and receiving.

TRANSMITTING

- Select the desired zone and channel/group ID.
- 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.
- 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 (Digital)

When you receive a group call on a Conventional channel and the received group ID matches the ID set up on your transceiver, you can hear the caller's voice.  
When you receive a group call on a Trunking channel, the transceiver automatically switches to the communications channel to receive the call.  
**Receiving Individual Calls (Digital)**  
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.

MANDATORY SAFETY INSTRUCTIONS TO INSTALLERS AND USERS

- Use only manufacturer or dealer supplied antenna.
  - Antenna Minimum Safe Distance: Refer to the values in the table below.**
  - 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 minimum safe distance indicated in the table below.
  - 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.

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**WARNING**

Maintain a separation distance from the antenna to person(s) of at least the distance indicated in the table below.

You, as the qualified end-user of this radio device must control the exposure conditions of bystanders to ensure the minimum separation distance (table below) 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.

| Antenna Minimum Safe Distance              |                                   |
|--------------------------------------------|-----------------------------------|
| NX-700-K/ NX-700H-K/ TK-5720-K             | 130 cm (4.3 feet), 50% duty Cycle |
| NX-800-K/ NX-800-K2/ NX-800H-K/ NX-800H-K2 | 110 cm (3.6 feet), 50% duty Cycle |
| NX-900-K/ NX-901-K                         | 60 cm (2 feet), 50% duty Cycle    |
| NX-720HG-K/ NX-820HG-K                     | 120 cm (4 feet), 50% duty Cycle   |
| NX-920-K/ NX-920G-K                        | 20 cm (8 inches), 50% duty Cycle  |
| NX-740HV-K/ NX-840H-K/ NX-840HU-K          | 120 cm (4 feet), 50% duty Cycle   |
| TK-5820-K/ TK-5820-K2                      | 110 cm (3.6 feet), 50% duty Cycle |