

Thank you for purchasing this charger. This product will offer years of reliable service when used to charge the specified battery packs.

FEATURES

- Capable of charging Li-ion and Ni-MH battery packs when either attached to or removed from the transceiver.
- Easy to use design allows you to start charging by simply sliding the battery pack into the charging slot.
- Overcharge protection. Protects against reduced battery pack life caused by excessive charging. After the rapid charge cycle has finished, the charger automatically switches to trickle charge (Ni-MH).
- Dual-color indicator informs you of the current charging status.

SUPPLIED ITEMS

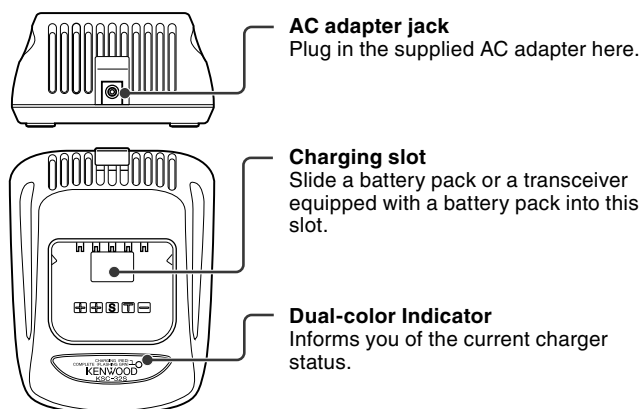
Charger (W0B-0078-XX)	1
AC adapter (W0H-0058-XX)	1
Instruction manual (B62-2331-XX)	1

APPLICABLE BATTERY PACKS

Charge only the battery packs listed below. Other types of batteries may burst, causing personal injury.

- Ni-MH: KNB-54N KNB-N4
- Li-ion: KNB-33L KNB-47L KNB-48L KNB-L1
KNB-L2 KNB-L3

ORIENTATION




SPECIFICATIONS

AC Voltages	100 - 240 V
Dimensions (W x H x D) <charger only>	102 x 56.4 x 131.5 mm 4.02 x 2.22 x 5.18 in
Weight <charger only>	Approx. 190 g/ 6.7 oz

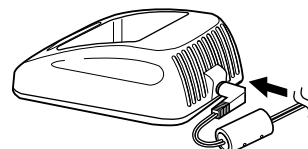
ATTENTION: Check the rating label attached to the bottom of the charger for other important specifications.

CHARGING PROCEDURE

 **WARNING**
Do not use in explosive atmospheres (gases, dust, fumes, etc.).

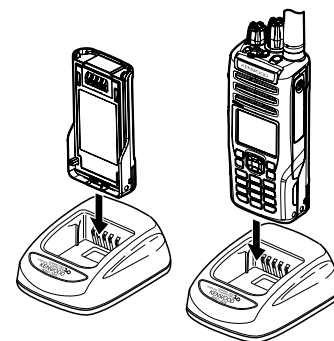
ATTENTION: Always switch OFF a transceiver equipped with a battery pack before inserting the transceiver into the charger.

- 1 Plug the AC adapter cable into the adapter 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.
 - Make sure the metal contacts of the battery pack mate securely with the charger terminals.
 - The indicator lights red and charging starts.



- 4 When charging is completed, the indicator flashing green. Remove the battery pack or the transceiver from the charging slot.
 - When the charger will not be used for a long time, unplug the AC adapter from the AC outlet.

Approximate Charging Times

Battery Pack	Voltage	Charging Time
KNB-33L	7.4 V	140 minutes
KNB-47L	7.4 V	140 minutes
KNB-48L	7.4 V	170 minutes
KNB-54N	7.2 V	170 minutes
KNB-L1	7.4 V	150 minutes
KNB-L2	7.4 V	180 minutes
KNB-L3	7.4 V	240 minutes
KNB-N4	7.2 V	170 minutes

For other battery packs, please contact your dealer or refer to the catalog of the transceiver.

Charger Status Table

Indicator Color	Meaning
Red	A battery pack is in the battery pack slot and charging has started.
Flashing Red	The battery pack is defective or the battery pack contacts are not properly mated with those of the charger.
Flashing Green	Charging is completed; remove the battery pack from the charger.

CHARGING TIPS

- ◆ Using the transceiver while charging its battery pack will interfere with correct charging.
- ◆ If the operating time of a battery pack decreases although the battery pack is fully and correctly charged, the battery pack life is over. Replace the battery pack.
- ◆ The ambient temperature should be from 5°C to 40°C while charging is in progress. When the ambient temperature is in the upper limits (close to 40°C), the charging time may become longer than normal.
- ◆ The charging times provided are obtained when a battery pack discharged to 1 V/cell x 6 (Ni-MH) or 3 V/cell x 2 (Li-ion) is charged at normal temperatures. This charging time varies depending on the degree of discharge and the ambient charging temperature.
- ◆ This charger may be suitable to charge battery packs not listed herein, due to further technology development. Check your transceiver Instruction Manual to confirm whether this charger is suitable for your battery pack.
- ◆ If the battery pack contacts are not properly mated with the charger terminals, the indicator may flashing red or may remain unlit. To resolve this problem, reinsert the battery pack after cleaning the battery pack contacts and the charger terminals.
- ◆ Repeatedly recharging a fully charged battery pack, or almost fully charged pack, shortens its operating time. To resolve this problem, use the pack until it is completely discharged, then recharge the pack to full capacity (Ni-MH).
- ◆ The battery life in charge/discharge cycles is approximately 300. However, overcharging and excessive discharging shortens the battery pack life.
- ◆ When using this equipment near a radio or television, you may experience interference with reception.

SAFETY PRECAUTIONS

Please read all safety instructions before using this charger. For best results, be aware of all warnings on the charger, the battery pack, and the product using the battery pack. Follow the provided operating instructions, and retain them for future reference.

- Do not disassemble the charger. Incorrect reassembly can cause fire or electric shock.
- Use of an attachment not recommended by nor sold by **KENWOOD** can cause fire, electric shock, or injury.
- Do not expose the charger to rain or moisture, to avoid the risk of fire or electric shock.
- Do not use an extension cable unless absolutely necessary. Improper extension cables can cause fire or electric shock. If an extension cable is required, observe the following points:
 - a) The quantity, size, and shape of pins on the extension cable plugs must be the same as on the AC adapter supplied with the charger.
 - b) The extension cable must be properly wired and in good electrical condition.
 - c) The wire size must be adequate to carry the current required by this charger.

Extension cables shorter than 100 feet:

 - Wire size must be 18 AWG or larger

Extension cables 100 to 150 feet, inclusive:

 - Wire size must be 16 AWG or larger
- Always remove the AC adapter from a wall outlet before attempting to inspect or clean the charger. Removing the battery packs or changing the controls does not remove the AC voltage from the charger.
- Position the AC adapter cable so it will not be stepped on, tripped over, nor subjected to damage.
- Always remove the AC adapter from an AC wall outlet by pulling on the adapter rather than the cable.
- Do not use the charger if it has a damaged AC adapter or adapter cable, or if the charger has been damaged in any way. Contact your **KENWOOD** dealer to replace or repair the damaged part.

- Prevent strong impacts, such as caused by dropping, since the charger can be damaged.
- Do not use the charger in hot or humid environments, in direct sunlight, nor near heaters.
- Do not use solvents such as benzene or paint thinner to clean the charger.
- Use only the supplied AC adapter.
- The socket-outlet shall be near the equipment and shall be easily accessible.
- Do not install this equipment in a confined space such as a book case or similar unit.
- Attention should be drawn to the environmental aspects of battery disposal.



Information on Disposal of Old Electrical and Electronic Equipment and Batteries (applicable for countries that have adopted separate waste collection systems)



Products and batteries with the symbol (crossed-out wheeled bin) cannot be disposed of as household waste. Old electrical and electronic equipment and batteries should be recycled at a facility capable of handling these items and their waste byproducts.



Contact your local authority for details in locating a recycle facility nearest to you.



Proper recycling and waste disposal will help conserve resources whilst preventing detrimental effects on our health and the environment.

Notice: The sign "Pb" below the symbol for batteries indicates that this battery contains lead.