

OPTIONS

◇ BATTERY PACKS

- **BP-278/BP-279/BP-280** BATTERY PACK

Battery pack	Voltage	Capacity	Battery life*
BP-278	7.2 V	1130 mAh (minimum) 1190 mAh (typical)	10 hours
BP-279		1485 mAh (minimum) 1570 mAh (typical)	14 hours
BP-280		2280 mAh (minimum) 2400 mAh (typical)	21 hours

* When the power save function is turned ON, and the operating periods are calculated under the following conditions:
TX:RX:standby = 5:5:90

◇ CHARGERS

- **BC-213** DESKTOP CHARGER + **BC-123S** AC ADAPTER
To rapid charge a battery pack.
- **BC-214** MULTI CHARGER + **BC-157S** AC ADAPTER
To rapid simultaneously charge up to 6 battery packs.

◇ DC CABLES

- **CP-23L** CIGARETTE LIGHTER CABLE
Use when charging the battery pack from a 12 V cigarette lighter socket. (Use with the BC-213)
- **OPC-656** DC POWER CABLE
Use with a 13.8 V power source instead of a power adapter. (Use with the BC-214)

◇ ANTENNA

- **FA-B2E** VHF ANTENNA
The same antenna that is supplied with the transceiver.

◇ OTHERS

- **MB-130** MOBILE BRACKET
Mounts the BC-213 DESKTOP CHARGER in a variety of places in your vehicle.
- **MB-133** BELT CLIP
The same belt clip that is supplied with the transceiver.
- **HM-158LA/HM-159LA/HM-168LWP** SPEAKER MICROPHONE
Combination speaker-microphone that provides convenient operation while the transceiver is hanging on your belt.
- **HM-153LA/HM-166LA** EARPHONE-MICROPHONE
Ideal for hands-free operation. Clip the HM-153LA or HM-166LA (with integrated PTT SWITCH) to your lapel or breast pocket.
- **HS-94/HS-95/HS-97** HEADSET + **VS-4LA** PTT SWITCH CABLE
HS-94: Ear-hook type
HS-95: Neck-arm type
HS-97: Throat microphone
VS-4LA: To connect to headsets

Some options may not be available in some countries. Ask your dealer for details.

Approved Icom optional equipment is designed for optimal performance when used with an Icom transceiver. Icom is not responsible for the destruction or damage to an Icom transceiver in the event the Icom transceiver is used with equipment that is not manufactured or approved by Icom.

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Thank you for choosing this Icom product.
READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

EXPLICIT DEFINITIONS

WORD	DEFINITION
⚠ DANGER!	Personal death, serious injury or an explosion may occur.
⚠ WARNING!	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.

PRECAUTIONS

- ⚠ **DANGER! NEVER** short the terminals of the battery pack. Shorting may occur if the terminals touch metal objects such as a key, so be careful when placing the battery packs (or the transceiver) in bags, and so on. Carry them so that shorting cannot occur with metal objects. Shorting may damage not only the battery pack, but also the transceiver.
- ⚠ **DANGER! NEVER** use or charge Icom battery packs with non-Icom transceivers or non-Icom chargers. Only Icom battery packs are tested and approved for use with Icom transceivers or charged with Icom chargers. Using third-party or counterfeit battery packs or chargers may cause smoke, fire, or cause the battery to burst.
- ⚠ **DANGER! NEVER** operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere.
- ⚠ **WARNING! NEVER** operate the transceiver with a headset or other audio accessories at high volume levels. The continuous high volume operation may cause a ringing in your ears. If you experience the ringing, reduce the volume level or discontinue use.
- ⚠ **WARNING! NEVER** operate the transceiver while driving a vehicle. Safe driving requires your full attention— anything less could result in an accident.
- CAUTION: DO NOT** operate unless the flexible antenna, battery pack are securely attached to the transceiver. Confirm that the antenna and battery pack are dry before attaching. Exposing the inside of the transceiver to dust or water can cause serious damage to the transceiver.
- CAUTION: DO NOT** use harsh solvents such as benzine or alcohol when cleaning. This could damage the equipment surfaces. If the surface becomes dusty or dirty, wipe it clean with a soft, dry cloth.

- DO NOT** place or leave the transceiver in direct sunlight or in places with temperatures below –30°C (–22°F) or above +60°C (+140°F). The basic operations of the transceiver are guaranteed within the specified operating temperature range. However, the Liquid Crystal Display may not operate correctly, or show an indication in the case of long hours of operation, or after being placed in extremely cold areas.
- CAUTION: DO NOT** modify the transceiver. The specifications may change and then the transceiver may not comply with the requirements of required regulations. The transceiver warranty does not cover any problems caused by unauthorized modification.
- CAUTION: DO NOT** operate the transceiver if it becomes hot after continuously transmitting for long periods of time. This may damage the transceiver.
- BE CAREFUL!** The transceiver meets IP67 requirements for dust-tight and waterproof protection. However, once the transceiver has been dropped, dust-tight and waterproof protection cannot be guaranteed because of possible damage to the transceiver’s case or the waterproof seal.
- Even when the transceiver power is OFF, a slight current still flows in the circuits. Remove the battery pack from the transceiver when not using it for a long time. Otherwise, the installed battery pack will become exhausted, and will need to be recharged or replaced.
- MAKE SURE** to turn OFF the transceiver power before connecting the supplied or optional equipment.
- ◇ **Battery caution**
 - Misuse of Li-ion batteries may result in the following hazards: smoke, fire, or the battery may rupture. Misuse can also cause damage to the battery or degradation of battery performance.
 - ⚠ **DANGER! NEVER** short the terminals of the battery pack. Shorting may occur if the terminals touch metal objects such as a key, so be careful when placing the battery packs (or the transceiver) in bags, and so on. Carry them so that shorting cannot occur with metal objects. Shorting may damage not only the battery pack, but also the transceiver.
 - ⚠ **DANGER! NEVER** strike or otherwise impact the battery pack. Do not use the battery pack if it has been severely impacted or dropped, or if the pack has been subjected to heavy pressure. Battery pack damage may not be visible on the outside of the case. Even if the surface of the battery does not show cracks or any other damage, the cells inside the battery may rupture or catch fire.

PRECAUTIONS (Continued)

⚠ **DANGER! NEVER** place or leave battery packs in areas with temperatures above +60°C (+140°F). High temperature buildup in the battery cells, such as could occur near fires or stoves, inside a sun-heated vehicle, or in direct sunlight for long periods of time may cause the battery cells to rupture or catch fire. Excessive temperatures may also degrade the battery pack's performance or shorten the battery cell's life.

⚠ **DANGER! NEVER** expose the battery pack to rain, snow, seawater, or any other liquids. Do not charge or use a wet pack. If the pack gets wet, be sure to wipe it dry before using.

⚠ **DANGER! NEVER** place or leave battery packs near fire. Fire or heat may cause them to rupture or explode. Dispose of used battery packs in accordance with local regulations.

⚠ **DANGER! NEVER** solder the battery terminals, or **NEVER** modify the battery pack. This may cause heat generation, and the battery may burst, emit smoke or catch fire.

⚠ **DANGER! NEVER** let fluid from inside the battery get in your eyes. This can cause blindness. Rinse your eyes with clean water, without rubbing them, and immediately go to a doctor.

⚠ **WARNING! NEVER** use the battery pack if it emits an abnormal odor, heats up, or is discolored or deformed. If any of these conditions occur, contact your Icom dealer or distributor.

⚠ **WARNING! NEVER** put the battery pack in a microwave oven, high-pressure container, or in an induction heating cooker. This could cause a fire, overheating, or cause the battery cells to rupture.

CAUTION: DO NOT use the battery pack out of the specified temperature range for the transceiver (−30°C ~ +60°C (−22°F ~ +140°F)) and the battery itself (−20°C ~ +60°C (−4°F ~ +140°F)). Using the battery out of its specified temperature range will reduce its performance and battery cell's life. Please note that the specified temperature range of the battery may exceed that of the transceiver. In such cases, the transceiver may not work properly because it is out of its operating temperature range.

CAUTION: Shorter battery life could occur if the battery is left fully charged, completely discharged, or in an excessive temperature environment (above +50°C (+122°F)) for an extended period of time. If the battery pack must be left unused for a long time, it must be detached from the transceiver after discharging. You may use the battery pack until the remaining capacity is about half, then keep it safely in a cool and dry place at the following temperature range:

- −20°C ~ +50°C (−4°F ~ +122°F) (within a month)
- −20°C ~ +40°C (−4°F ~ +104°F) (within three months)
- −20°C ~ +20°C (−4°F ~ +68°F) (within a year)

BE SURE to replace the battery pack with a new one approximately five years after manufacturing, even if it still holds a charge. The inside battery material will become weak after a period of time, even with little use. The estimated number of times you can charge the battery is between 300 and 500. Even when the battery appears to be fully charged, the operating time of the transceiver may become short when:

- Approximately five years have passed since the battery was manufactured.
- The battery has been repeatedly charged.

◇ Charging caution

⚠ **DANGER! NEVER** charge the battery pack in areas with extremely high temperatures, such as near fires or stoves, inside a sun-heated vehicle, or in direct sunlight. In such environments, the safety/protection circuit in the battery will activate, causing the battery to stop charging.

⚠ **WARNING! NEVER** charge the transceiver during a lightning storm. It may result in an electric shock, cause a fire or damage the transceiver. Always disconnect the power adapter before a storm.

⚠ **WARNING! NEVER** charge or leave the battery in the battery charger beyond the specified time for charging. If the battery is not completely charged by the specified time, stop charging and remove the battery from the battery charger. Continuing to charge the battery beyond the specified time limit may cause a fire, overheating, or the battery may rupture.

⚠ **WARNING! NEVER** insert the transceiver (battery attached to the transceiver) into the charger if it is wet or soiled. This could corrode the battery charger terminals or damage the charger. The charger is not waterproof.

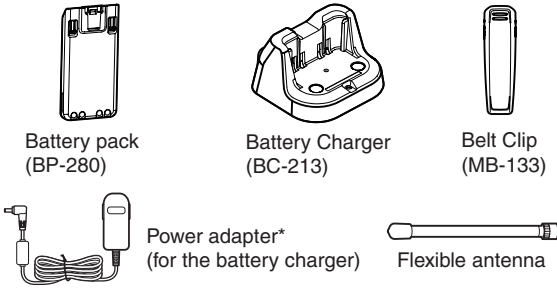
CAUTION: NEVER charge the battery outside of the specified temperature range: BC-213 (15°C ~ 40°C (59°F ~ 104°F)). Otherwise, the charging time will be longer, but the battery will not reach a full charge. While charging, at a point after the temperature goes out of the specified range, the charging will automatically stop.

RECOMMENDATION

CLEAN THE TRANSCEIVER THOROUGHLY IN A BOWL OF FRESH WATER after exposure to saltwater, and dry it before operating. Otherwise, the transceiver's keys, switches, and controllers may become unusable, due to salt crystallization, and/or the charging terminals of the battery pack may corrode.

NOTE: If the transceiver's waterproof protection appears defective, carefully clean the transceiver with a soft, damp (fresh water) cloth, then dry it before operating. The transceiver may lose its waterproof protection if the case, jack cap, or connector cover is cracked or broken, or the transceiver has been dropped. Contact your Icom distributor or your dealer for advice.

SUPPLIED ACCESSORIES



* Not supplied or the shape is different, depending on the transceiver version.

BATTERY CHARGING

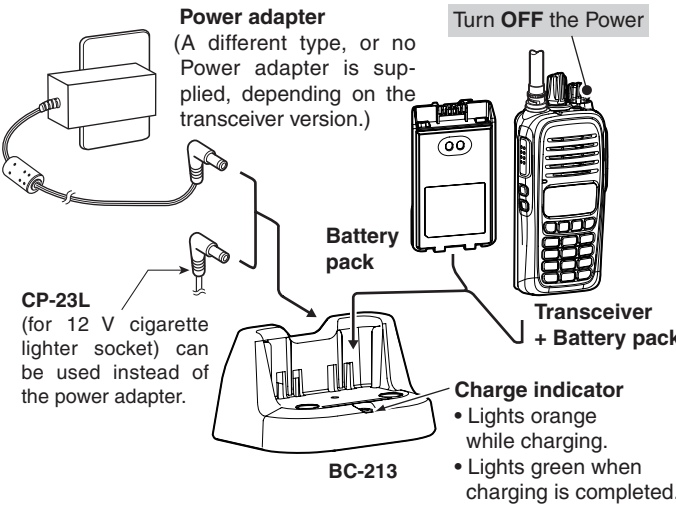
◇ Rapid charging with the supplied BC-213

The BC-213 DESKTOP CHARGER rapidly charges the Li-ion battery pack. The BC-213 is used with the power adapter or the CP-23L CIGARETTE LIGHTER CABLE (purchase separately).

- **Charging time of the BP-280**
Approximately 4 hours

CAUTION: STOP charging, if the charge indicator lights orange and green alternately. In this case, a charging failure is occurring.

NOTE: Charge the battery within the specified temperature range of +10°C to +40°C. Otherwise, the charging time will be longer, but the battery will not reach a full charge. While charging, at a point where the temperature goes out of the specified range, the charging will automatically stop.



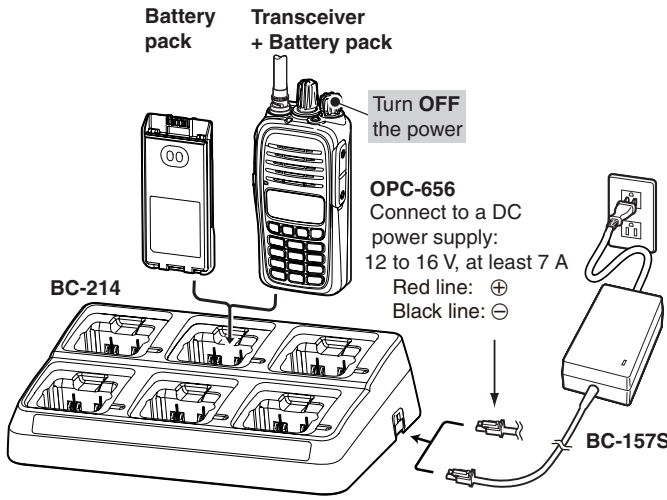
◇ Rapid charging with the BC-214

The BC-214 MULTI CHARGER* can simultaneously charge up to 6 Li-ion battery packs. The BC-214 is used with the BC-157S AC ADAPTER* or the OPC-656 DC POWER CABLE*.

* Purchase separately

- **Charging time of the BP-280**
Approximately 4 hours

① For more information about Icom accessories, read **OPTIONS** described on INSTRUCTIONS ②.



Icom is not responsible for the destruction, damage to, or performance of any Icom or non-Icom equipment, if the malfunction is because of:

- Force majeure, including, but not limited to, fires, earthquakes, storms, floods, lightning, other natural disasters, disturbances, riots, war, or radioactive contamination.
- The use of Icom transceivers with any equipment that is not manufactured or approved by Icom.