

BASIC OPERATION

◇ Turning ON the power

Before using the transceiver for the first time, the battery must be fully charged for optimum life and operation.

Rotate [VOL] to turn ON the power.

◇ Receiving and Transmitting

• Receiving

- Rotate [ROTARY SELECTOR] to select a channel.
- When receiving a call, rotate [VOL] to adjust the audio output to a comfortable listening level.

• Transmitting

Wait until the channel is clear to avoid interference.

- While holding down [PTT], speak at your normal voice level.
- Release [PTT] to receive.

NOTE:

- To insure the readability of your signal:
- After pushing [PTT], pause briefly before you start speaking.
 - Hold the microphone 5 to 10 cm from your mouth, and then speak at your normal voice level.

◇ Call-Ring operation

Sends the preselected ring tone of your group members.

• Call your group members with a Call-Ring

- Set the same operating channel and CTCSS tone for all of your group transceivers.
- Hold down [Upper] for 1 second to send the preselected ringer to your group members.
 - The ringer sounds while holding down [Upper].
 - The same ringer sounds from your group members' speaker.

◇ Smart-Ring operation

This function has an answer back feature. You can confirm whether or not a call has reached your group members, even if the operators are temporarily away from their transceivers. The called transceiver automatically sends an answer back call to your transceiver.

- Set the same operating channel and CTCSS tone for all of your group transceivers, as described on the reverse side of this sheet.
- Push [Upper] to make the Smart-Ring call.
 - When an answer back is received, the transceiver sounds beep tones every 10 seconds and the LED indicator blinks orange.
 - Push [Lower] to stop the beeps and the LED blinking.
 - When no answer back is received, the transceiver sounds short failure beeps.
- Push [PTT] to answer the call and stop the beeps and blinking.

NOTE: This function is usable only when the called stations' transceivers are set to the same CTCSS tone and operating channel.

OPTIONS

◇ BATTERY PACKS

• BP-278/BP-279 BATTERY PACK

Battery pack	Voltage	Capacity	Battery life*
BP-278	7.2 V	1130 mAh (minimum) 1190 mAh (typical)	16 hours
BP-279		1485 mAh (minimum) 1570 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
- BC-214 MULTI CHARGER + BC-157S AC ADAPTER

◇ DC CABLES

- CP-23L CIGARETTE LIGHTER CABLE
For BC-213.
- OPC-656 DC POWER CABLE
For BC-214.

◇ OTHERS

- MB-130 MOBILE BRACKET
- MB-133 BELT CLIP
- HM-158LA, HM-159LA, HM-168LWP
SPEAKER MICROPHONE
- HM-153LA, HM-166LA EARPHONE MICROPHONE
- 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 headset and for PTT use

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

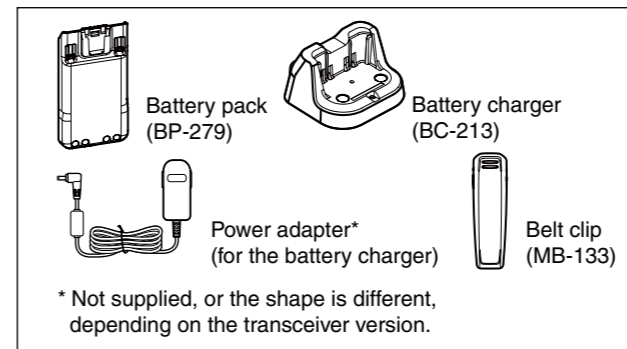
Approved Icom optional equipment is designed for optimal performance when used with an Icom transceiver. Icom is not responsible for the destruction or damage to an Icom transceiver in the event the Icom transceiver is used with equipment that is not manufactured or approved by Icom.

ICOM INSTRUCTIONS

PMR446 TRANSCEIVER IC-F29SR

Thank you for choosing the IC-F29SR PMR446 TRANSCEIVER.
READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SUPPLIED ACCESSORIES



For accessory attachment details, download the IC-F29SR operating guide from the Icom web site.
(<http://www.icom.co.jp/world/support/>)

RECOMMENDATION

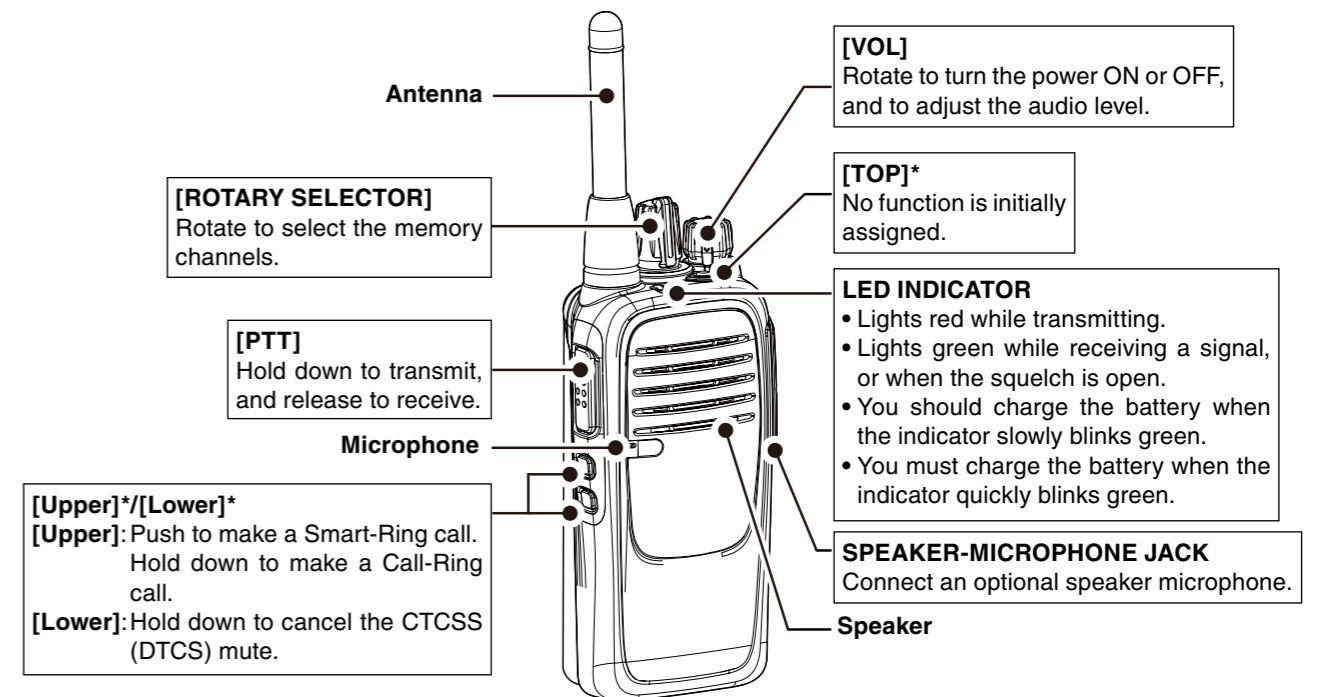
CLEAN THE TRANSCEIVER THOROUGHLY WITH FRESH WATER after exposure to saltwater, and dry it before operating. Otherwise, the transceiver's keys, switches and controllers may become unusable due to salt crystallization.

NOTE: DO NOT submerge the transceiver in water if you suspect the waterproof protection may not be effective, especially after one of the following:

- The transceiver has been dropped
- The transceiver's case or the waterproof seal is cracked or damaged
- The jack cover or the optional HM-168LWP is detached from the transceiver.



PANEL DESCRIPTION



*Other functions can be assigned to these keys with the CS-F29SR cloning software (purchase separately).

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For more information, download the IC-F29SR operating guide from the Icom web site.
(<http://www.icom.co.jp/world/support/>)

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

• Radio caution

⚠ **DANGER! NEVER** short the charging terminals of the battery pack.

⚠ **DANGER!** Use and charge only specified Icom battery packs with Icom radios or Icom chargers. Only Icom battery packs are tested and approved for use with Icom radios or to be charged by Icom chargers. Using third-party or counterfeit battery packs or chargers may cause smoke, fire, or cause the battery packs to burst.

⚠ **WARNING! NEVER** hold the radio so that the antenna is very close to, or touching exposed parts of the body, especially the face or eyes, while transmitting. The radio will perform best if the microphone is 5 to 10 cm away from the lips and the radio is vertical.

⚠ **WARNING! NEVER** operate the radio 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 radio while driving a vehicle. Safe driving requires your full attention—anything less may result in an accident.

CAUTION: MAKE SURE the flexible antenna, battery pack and jack cover are securely attached to the radio, and that the antenna and battery pack are dry before attachment. Exposing the inside of the radio to dust or water will result in serious damage to the radio.

DO NOT operate the radio near unshielded electrical blasting caps or in an explosive atmosphere.

DO NOT push [PTT] when you do not actually intend to transmit.

DO NOT operate or place the radio in direct sunlight or in places with temperatures below -30°C or above $+60^{\circ}\text{C}$. The basic operations of the radio are guaranteed within the specified operating temperature range.

DO NOT modify the radio. The specifications may change and then not comply with the requirements of a corresponded regulation. The radio warranty does not cover any problems caused by unauthorized modification.

DO NOT use harsh solvents such as benzene or alcohol when cleaning, as they will damage the radio surfaces.

BE CAREFUL! The radio may become hot when operating it continuously for long periods of time.

BE CAREFUL! The radio meets IP67* requirements for dust-tight and waterproof protection. However, once the radio has been dropped, dust-tight and waterproof protection cannot be guaranteed because of possible damage to the radio's case or the waterproof seal.

*Only when the jack cover or the optional HM-168LWP is attached.

Even when the radio power is OFF, a slight current still flows in the circuits. Remove the battery pack from the radio 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 radio 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 pack may rupture. Misuse can also cause damage to the battery pack or degradation of battery performance.

⚠ **DANGER! NEVER** short terminals (or charging terminals) of the battery pack. Also, current may flow into nearby metal objects such as a key, so be careful when placing the battery packs (or the radio) in handbags, etc.

Simply carrying with or placing near metal objects such as a key, etc. may cause shorting. This may damage not only the battery pack, but also the radio.

⚠ **DANGER! DO NOT** hammer or otherwise impact the battery pack. Do not use the battery pack if it has been severely impacted or dropped, or if it has been subjected to heavy pressure. The damage may not be visible on the outside of the case. Even if the surface of the battery pack does not show cracks or any other damage, the cells inside may rupture or catch fire.

⚠ **DANGER! NEVER** use or leave the battery pack in areas with temperatures above $+60^{\circ}\text{C}$. High temperature buildup in the battery pack, such as could occur near fires or stoves, inside a sun heated car, or in direct sunlight for long periods of time may cause the battery pack to rupture or catch fire. Excessive temperatures may also degrade performance or shorten battery life.

⚠ **DANGER! DO NOT** expose the battery pack to rain, snow, seawater, or any other liquids. Do not charge or use a wet battery pack. If the battery pack gets wet, be sure to wipe it dry before using.

⚠ **DANGER! KEEP** the battery pack away from fire. Fire or heat may cause them to rupture or explode. Dispose of an used battery pack in accordance with local regulations.

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

⚠ **DANGER!** Use the battery pack only with the radio for which it is specified. Never use a battery pack with any other equipment, or for any purpose that is not specified in this sheet.

⚠ **DANGER!** If fluid from inside the battery pack gets in your eyes, blindness can result. Rinse your eyes with clean water, without rubbing them, and see a doctor immediately.

⚠ **WARNING!** Immediately stop using 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.

PRECAUTIONS (continued)

⚠ **WARNING!** Immediately wash, using clean water, any part of the body that comes into contact with fluid from inside the battery pack.

⚠ **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 pack to rupture.

CAUTION: Always use the battery pack within the specified temperature range, for the radio (-30°C to $+60^{\circ}\text{C}$) and the battery pack itself (-20°C to $+60^{\circ}\text{C}$). Using the battery pack out of its specified temperature range will reduce the performance and the life. Please note that the specified temperature range of the battery pack may exceed that of the radio. In such cases, the radio may not work properly because it is out of its operating temperature range.

CAUTION: Shorter battery life could occur if the battery pack is left fully charged, completely discharged, or in an excessive temperature environment (above $+50^{\circ}\text{C}$) for an extended period of time. If the battery pack must be left unused for a long time, it must be detached from the radio 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 to $+50^{\circ}\text{C}$ (within a month)
- -20°C to $+40^{\circ}\text{C}$ (within three months)
- -20°C to $+20^{\circ}\text{C}$ (within a year)

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-279

Approximately 2 to 3 hours

⚠ **CAUTION: STOP** charging if the charge indicator lights orange and green alternately. This indicates charging failure is occurring.

⚠ **NOTE:** Charge the battery within the specified temperature range of $+10^{\circ}\text{C}$ to $+40^{\circ}\text{C}$. 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-279

Approximately 2 to 3 hours

BE SURE to replace the battery pack with a new one after five years, even if still holds a charge. The inside battery material will deteriorate after a period of time, even with little use.

• 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 pack will activate, causing the battery to stop charging.

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

⚠ **WARNING! NEVER** insert the radio (the battery pack attached to the radio) 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.

NOTE: Charge the battery pack within the specified temperature range of $+10^{\circ}\text{C}$ to $+40^{\circ}\text{C}$. Otherwise, the charging time will be longer, but the battery pack 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.

