

ICOM INSTRUCTIONS

VHF DIGITAL TRANSCEIVERS IC-F3400D series IC-F3400DP series

UHF DIGITAL TRANSCEIVERS IC-F4400D series IC-F4400DP series

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

IMPORTANT

This instruction sheet includes some functions that are usable only when they are preset by your dealer. The transceiver may have other functions and operations that are not described in this instruction sheet. Ask your dealer for preset function details.

SAVE THESE INSTRUCTIONS — These instructions contain important operating instructions for the IC-F3400DT/IC-F3400DS/IC-F3400DPT/IC-F3400DPS/IC-F3400DP VHF DIGITAL TRANSCEIVERS and the IC-F4400DT/IC-F4400DS/IC-F4400DPT/IC-F4400DPS/IC-F4400DP UHF DIGITAL TRANSCEIVERS.

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.

Icom is not responsible for the destruction or damage to the Icom transceiver, 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.

Icom Inc.

1-1-32 Kamiminami, Hirano-ku, A7311D-1EX-6a
Osaka 547-0003, Japan Printed in Japan
Jun. 2021 © 2012–2021 Icom Inc.

FCC INFORMATION

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

CAUTION: Changes or modifications to this transceiver, not expressly approved by Icom Inc., could void your authority to operate this transceiver under FCC regulations.


This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

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 it 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.

ABOUT CE AND DOC

 Hereby, Icom Inc. declares that the versions of IC-F3400DT, IC-F3400DS, IC-F3400D, IC-F3400DPT, IC-F3400DPS, IC-F3400DP, IC-F4400DT, IC-F4400DS, IC-F4400D, IC-F4400DPT, IC-F4400DPS, and IC-F4400DP which have the "CE" symbol on the product, comply with the essential requirements of the Radio Equipment Directive, 2014/53/EU, and the restriction of the use of certain hazardous substances in electrical and electronic equipment Directive, 2011/65/EU. The full text of the EU declaration of conformity is available at the following internet address:
<https://www.icomjapan.com/support/>

DISPOSAL

 The crossed-out wheeled-bin symbol on your product, literature, or packaging reminds you that in the European Union, all electrical and electronic products, batteries, and accumulators (rechargeable batteries) must be taken to designated collection locations at the end of their working life. Do not dispose of these products as unsorted municipal waste. Dispose of them according to the laws in your area.

PRECAUTIONS

⚠ DANGER! NEVER short terminals of the battery pack. This may damage not only the battery pack, but also the transceiver.

⚠ DANGER! NEVER operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere.

⚠ 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.

⚠ 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 may result in an accident.

CAUTION: 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 use harsh solvents such as Benzene or alcohol when cleaning, because they will damage the transceiver surfaces.

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 carry the transceiver by holding the antenna.

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

NEVER place the transceiver in an insecure place to avoid inadvertent use by unauthorized persons.

BE CAREFUL! The transceiver may become hot when operating it continuously for long periods of time. This may damage the transceiver.

BE CAREFUL! The transceiver meets IP68 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.

NOTE: 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.

ALWAYS turn OFF the transceiver power before connecting any external devices.

VOICE CODING TECHNOLOGY

The AMBE+2™ voice coding Technology embodied in this product is protected by intellectual property rights including patent rights, copyrights and trade secrets of Digital Voice Systems, Inc. This voice coding Technology is licensed solely for use within this Communications Equipment. The user of this Technology is explicitly prohibited from attempting to extract, remove, decompile, reverse engineer, or disassemble the Object Code, or in any other way convert the Object Code into a human-readable form. U.S. Patent Nos. #8,595,002, #8,359,197, #8,315,860, #8,200,497, #7,970,606, and #6,912,495 B2.

ABOUT GPS/GLONASS RECEIVER

An internal GPS or GLONASS receiver may not work if the transceiver transmits or receives in the frequency ranges as shown below. This problem is made in the internal circuit and does not indicate a transceiver malfunction.

For the IC-F3400D and IC-F3400DP series (Unit: MHz)


	GPS receiver	GLONASS receiver
Transmit	142.850 ~ 142.860	145.275 ~ 145.945
	157.135 ~ 157.145	159.805 ~ 160.540
Receive	146.845 ~ 147.110	149.745 ~ 150.790

For the IC-F4400D and IC-F4400DP series (Unit: MHz)

	GPS receiver	GLONASS receiver
Transmit	392.840 ~ 392.865	399.515 ~ 401.343
Receive	443.545 ~ 444.065	449.335 ~ 451.425

SAFETY TRAINING INFORMATION

Your Icom radio generates RF electromagnetic energy while transmitting. This radio is designed for and classified as for "Occupational Use Only." This means it must be used only during the course of employment by individuals aware of the hazards, and the ways to minimize such hazards. This radio is NOT intended for use by the "General Population" in an uncontrolled environment. This radio has been tested and complies with the FCC and IC RF exposure limits for "Occupational Use Only". In addition, your Icom radio complies with the following Standards and Guidelines with regard to RF energy and electromagnetic energy levels and evaluation of such levels for exposure to humans:

 **WARNING**

- FCC KDB Publication 447498 D03, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- American National Standards Institute (C95.1-2019), IEEE Standard for Safety Levels with Respect to Human Exposure to Electric, Magnetic, and Electromagnetic Fields, 0 Hz to 300 GHz

⚡ 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 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 place or leave battery packs in areas with temperatures above 60°C (140°F). High temperature buildup in the battery, 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 to rupture or catch fire. Excessive temperatures may also degrade battery performance or shorten battery life.

⚠ DANGER! NEVER strike or otherwise impact the battery. Do not use the battery if it has been severely impacted or dropped, or if the battery has been subjected to heavy pressure. Battery 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.

⚠ 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 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 get medical treatment from an eye doctor.

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

⚠ WARNING! NEVER use deteriorated battery packs. They could cause a fire.

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

⚠ 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 let fluid from inside the battery come in contact with your body. If it does, immediately wash with clean water.

CAUTION: DO NOT use the battery pack out of the specified temperature range, for the transceiver, (-30°C ~ $+60^{\circ}\text{C}$, -22°F ~ $+140^{\circ}\text{F}$), and the battery pack itself (-20°C ~ $+60^{\circ}\text{C}$, -4°F ~ $+140^{\circ}\text{F}$). Using the battery out of its specified temperature range will reduce the battery's performance and battery 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.

- American National Standards Institute (C95.3-2021), IEEE Recommended Practice for Measurements and Computations of Electric, Magnetic, and Electromagnetic Fields with Respect to Human Exposure to Such Fields, 0 Hz to 300 GHz

- The antennas, batteries, belt clips, speaker-microphone, and other accessories that are listed in "OPTIONS" on this INSTRUCTIONS sheet, are authorized for use with this product. Use of accessories other than those specified may result in RF exposure levels exceeding the FCC and IC requirements for wireless RF exposure.

- Health Canada Safety Code 6 - Limits of Human Exposure to Electromagnetic Energy in the Frequency Range from 3 kHz to 300 GHz. To ensure that your exposure to RF electromagnetic energy is within the FCC and IC allowable limits for occupational use, always adhere to the following guidelines:

DO NOT operate the radio without a proper antenna



CAUTION

attached, as this may damage the radio and may also cause you to exceed FCC and IC RF exposure limits. A proper antenna is the antenna supplied with this radio by the manufacturer or an antenna specifically authorized by the manufacturer for use with this radio.

DO NOT transmit for more than 50% of the total radio use time ("50% duty cycle"). Transmitting more than 50% of the time can cause FCC and IC RF exposure compliance requirements to be exceeded. The radio is transmitting when the LED indicator lights red. You can cause the radio to transmit by pushing the "PTT" switch.

ALWAYS keep the antenna at least 2.5 cm (1 inch) away from the body when transmitting, and only use the Icom belt-clips listed in "OPTIONS" on this INSTRUCTIONS sheet when attaching the radio to your belt, or other place, to ensure FCC and IC RF exposure compliance requirements are not exceeded.

The information listed above provides the user with the information needed to make him or her aware of RF exposure, and what to do to assure that this radio operates within the FCC and IC RF exposure limits of this radio.

Electromagnetic Interference/Compatibility

During transmissions, your Icom radio generates RF energy that can possibly cause interference with other devices or systems. To avoid such interference, turn off the radio in areas where signs are posted to do so. **DO NOT** operate the transmitter in areas that are sensitive to electromagnetic radiation such as hospitals, aircraft, and blasting sites.

Occupational/Controlled Use

The radio transmitter is used in situations in which persons are exposed as a consequence of their employment, provided those persons are fully aware of the potential for exposure and can exercise control over their exposure.

CAUTION: Shorter battery life could occur if the battery is left fully charged, completely discharged, or in an excessive temperature environment (above $+50^{\circ}\text{C}$ ($+122^{\circ}\text{F}$)) 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 ~ $+50^{\circ}\text{C}$ (-4°F ~ $+122^{\circ}\text{F}$) (within a month)
- -20°C ~ $+40^{\circ}\text{C}$ (-4°F ~ $+104^{\circ}\text{F}$) (within three months)
- -20°C ~ $+20^{\circ}\text{C}$ (-4°F ~ $+68^{\circ}\text{F}$) (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.

⚠ WARNING! Occasionally observe the battery pack condition while charging. If any abnormal condition occurs, discontinue using the battery pack.

NOTE: Charge the battery pack within the following specified temperature range:
BC-214 and BC-219 (16°C ~ 40°C (60.8°F ~ 104°F)).
BC-225, BC-226, and BC-227 (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. Icom recommends charging the pack at 25°C (77°F). The pack may heat up or rupture if charged out of the specified temperature range. Additionally, pack's performance or battery cell life may be reduced.

CAUTION: DO NOT use the power adapter unless the power outlet is easily accessible and near the unit. Remove it from the AC power outlet when not in use.

TECHNICAL INFORMATION

VHF Digital Transceiver

Model	Version	Frequency Range (MHz)	TX PWR (W)	SAR 10g (W/kg)
IC-F3400DT IC-F3400DS IC-F3400D	—	136 ~ 174	5	1.52
IC-F3400DPT IC-F3400DPS IC-F3400DP	—			

- Channel spacing: 6.25 kHz*/12.5 kHz/20 kHz*/25 kHz*³
- *1 Only Digital mode, *2 Only EUR versions, *3 Except USA versions

UHF Digital Transceiver

Model	Version	Frequency Range (MHz)	TX PWR (W)	SAR 10g (W/kg)
IC-F4400DT IC-F4400DS IC-F4400D	USA-01, 02, 11, 21 EUR-01, 11, 21 CAN-01, 11, 21 EXP-01, 02, 11, 12, 21 AUS-01, 11, 21	380 ~ 470	5	3.45
	USA-31, 32, 41, 51	450 ~ 512		
	AUS-31, 41, 51	450 ~ 520		
IC-F4400DPT IC-F4400DPS IC-F4400DP	—	380 ~ 470		

- Channel spacing: 6.25 kHz*/12.5 kHz/20 kHz*/25 kHz*³
- *1 Only Digital mode, *2 Only EUR versions, *3 Except USA versions

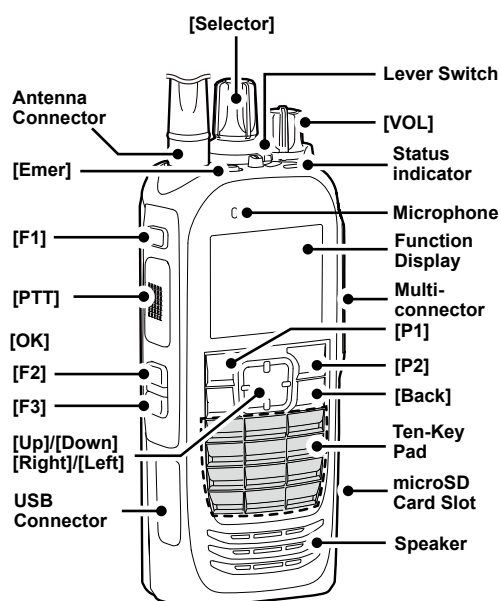
Icom, Icom Inc. and the Icom logo are registered trademarks of Icom Incorporated (Japan) in Japan, the United States, the United Kingdom, Germany, France, Spain, Russia, Australia, New Zealand, and/or other countries. The Bluetooth word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by Icom Inc. is under license. Other trademarks and trade names are those of their respective owners. All other products or brands are registered trademarks or trademarks of their respective holders.

PANEL DESCRIPTION

There are 3 types of transceivers.

Non-display types: IC-F3400D, IC-F4400D, IC-F3400DP, IC-F4400DP
 Simple key types: IC-F3400DS, IC-F4400DS, IC-F3400DPS, IC-F4400DPS
 Ten-key types: IC-F3400DT, IC-F4400DT, IC-F3400DPT, IC-F4400DPT

① The illustration below shows the Ten-key type transceiver.



◇ Status indicator

- Lights white, then blinks red, yellow, and green when turning ON the transceiver.
- Lights red while transmitting.
- Lights green while receiving a signal, or when the squelch is open.
- Blinks magenta when the battery is exhausted.

◇ Multi-connector

Connects to an optional speaker microphone or headset.

CAUTION: DO NOT use the transceiver without the connector cover or the optional equipment attached. The transceiver meets IP68 requirements for dust-tight and waterproof protection only when the connector cover or the optional HM-222 is attached.

◇ About the Software key functions

NOTE: Your dealers can assign the Software key functions to the keys, keypads, and the Lever switch.

BATTERY CHARGING

NOTE:

- Before detaching or attaching a battery pack, BE SURE to turn OFF the transceiver by rotating [VOL] fully counter clockwise, until it makes a "click" sound. Otherwise, a transceiver malfunction could occur.
- The internal clock will be reset to 00:00 if an exhausted battery is left in the transceiver, or the battery pack is detached, for long periods of time.

◇ Rapid charging with the BC-227

You can rapidly charge the Li-ion battery pack with the BC-242, BC-123S.

Charging time:

Approximately 4.4 hours for the BP-303

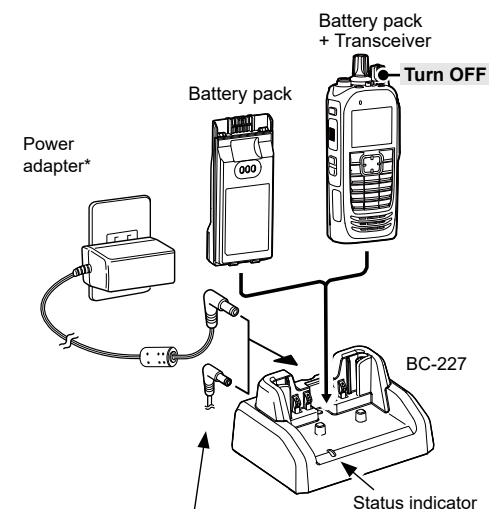
Additionally needed item (purchase separately):

A power adapter (may be supplied with the charger, depending on the charger version) or the OPC-515L/CP-23L DC POWER CABLES.

CAUTION: DO NOT reverse the polarity when connecting the OPC-515L to a power source. This will ruin the battery charger.
 White line: ⊕, Black line: ⊖

○ Status indicator

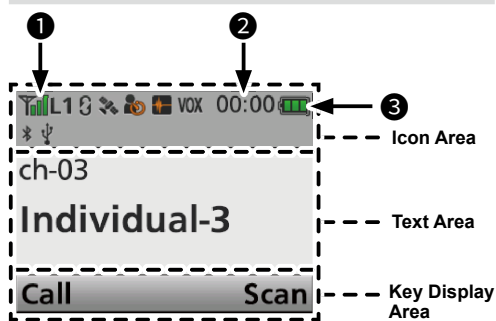
Light color	Status
Orange	Charging
Green	Charging is completed.
Blinks orange and green	Charging failed. It may have some problems.



The OPC-515L* (for a 13.8 V power source) or the CP-23L (for a 12 V cigarette lighter socket) can be used instead of the power adapter.

* A different type, or no power adapter is supplied, depending on the charger version.

FUNCTION DISPLAY



NOTE: The screen capture is an example. The displayed position of each icon may differ, depending on the function being used.

◇ Icon Area

Indicators

- SIGNAL STRENGTH INDICATOR**
Displays the relative receive signal strength level.
- CLOCK**
Displays the current time.
① "AM" or "PM" is displayed beside the time display when 12 hour display format is selected.
- BATTERY INDICATOR**
Displayed or blinks to indicate the battery status.

Indication	Full	Mid	Charging required	Battery exhausted
Battery status				

blinks when the battery is exhausted.

Icons

* These icons are not displayed, depending on the presetting.

POWER ICON

- "L1" is displayed when the output power is set to Low.
- "L2" is displayed when the output power is set to Mid.
- "H" is displayed when the output power is set to High.

AUDIBLE ICON

Displayed when the channel is in the 'audible' (unmuted) mode.

MESSAGE ICON

- Blinks after Messages (Message or Status Message) have been received.
- Stops blinking when the screen is changed, or any key is pushed, but is displayed if unread messages are still in the Message memory.
- Disappears when all messages in the Message memory have been read.

BASIC OPERATION

◇ Turning ON the transceiver

NOTE: Before using the transceiver for the first time, the battery pack must be fully charged for optimum life and operation. See the BATTERY CHARGING section of this sheet.

Rotate [VOL] to turn ON the transceiver.

◇ Receiving and Transmitting

Receiving:

- Select a channel.
 - Rotate [Selector].
 - Push [Up] or [Down].
- When receiving a call, rotate [VOL] to adjust the audio output level to a comfortable listening level.

Transmitting:

CAUTION: Attach an antenna before transmitting. Transmitting without an antenna may damage the transceiver.

- Wait until the channel is clear to avoid interference.
- While holding down [PTT], speak at your normal voice level.
- Release [PTT] to receive.

IMPORTANT:

- To maximize the readability of your signal:
- After pushing [PTT], pause briefly before you start speaking.
 - Hold the microphone 5 ~ 10 cm (2 ~ 4 inches) from your mouth, then speak at your normal voice level.

BELL ICON

Displayed when a matching signal is received, depending on the presetting.

SCAN ICON

- Displayed when a scan is paused.
- Blinks while scanning.

SCAN TARGET CHANNEL ICON

Displayed when the channel is selected as a scan target channel.

SCRAMBLER/ENCRYPTION ICON

- In the Analog mode:**
- Displayed when the Voice Scrambler function is ON.
- In the Digital mode:**
- Displayed when the Voice Encryption function is ON.
 - Blinks when decoding an encrypted signal.

GPS ICON*

- Displayed when valid position data is received.
- Blinks when searching for satellites or calculating position data.

RECORD ICON*

- Displayed when the Record function is ON. Blinks while recording audio.
- ① "△" is displayed when there is no microSD card's free space and cannot record audio.

TALK AROUND ICON

Displayed when the Talk Around function is ON.

PHONE ICON

- Displayed when the transceiver is connected to a telephone network on the selected channel.
- Blinks while receiving a phone call.

BROADCAST ICON

Displayed when receiving a Broadcast Call.
 ① For only the IC-F3400DP and IC-F4400DP series transceivers.

SITE LOCK ICON

Displayed when the Site Lock function is ON.

LONE WORKER ICON

Displayed when the Lone Worker function is ON.

MOTION SENSOR ICON

Displayed when the Motion Sensor function is ON.

NOISE CANCEL ICON

Displayed when the Noise Cancel function is ON.

SURVEILLANCE ICON

Displayed when the Surveillance function is ON.

VIBRATION ICON

Displayed when the Vibration function is ON.

VOX ICON

Displayed when the VOX function is ON.

Bluetooth® ICON

- Displayed when Bluetooth® is activated.
- Lights Blue when a Bluetooth® device is connected.
- Does not light when no Bluetooth® device is connected.

microSD ICON*

Displayed when the microSD card is inserted into the card slot.
 ① "△" is displayed when the microSD card has not been formatted.

USB ICON

Displayed when a USB device is connected.

◇ Text Area

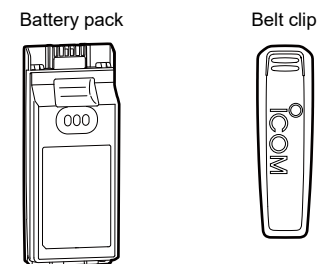
Displays the selected Zone number, Channel number, and Channel name, if set.

◇ Key Display Area

Displays the names of the function assigned to [P1] and [P2].
 ① Ask your dealer about the assigned Software key functions.

SUPPLIED ACCESSORIES

NOTE: Some accessories are not supplied, or the shape is different, depending on the transceiver version.



OPTIONS

◇ BATTERY PACKS

- BP-283*** Li-ion BATTERY PACK
 Voltage: 7.2 V
 Capacity: 1910 mAh (minimum), 2010 mAh (typical)
 Battery life: Approximately 10.5 hours
- BP-284*** Li-ion BATTERY PACK
 Voltage: 7.2 V
 Capacity: 3070 mAh (minimum), 3210 mAh (typical)
 Battery life: Approximately 16.5 hours
- BP-303*** Li-ion BATTERY PACK
 Voltage: 7.2 V
 Capacity: 3200 mAh (minimum), 3350 mAh (typical)
 Battery life: Approximately 16.5 hours
 *1 When the power save function is set to "Short," and the operating periods are calculated under the following conditions:
 TX : RX : standby = 5 : 5 : 90

◇ CHARGERS

- BC-219** DESKTOP CHARGER + **BC-123S** AC ADAPTER
 For rapidly charging of battery packs.
 Charging time: Approximately 2.8 hours for the BP-283
 ① A power adapter may be supplied, depending on the charger's version.
- BC-227** DESKTOP CHARGER + **BC-123S**, **BC-242** AC ADAPTER, **OPC-515L** DC POWER CABLE
 For rapidly charging of battery packs.
 Charging time: Approximately 4.4 hours for the BP-303
 ① A power adapter may be supplied, depending on the charger's version.
- BC-214** MULTI-CHARGER + **BC-157S** AC ADAPTER, **OPC-656** DC POWER CABLE
 For rapidly charging of up to 6 battery packs simultaneously.
 Charging time: Approximately 2.8 hours for the BP-283
 ① The AD-130 CHARGER ADAPTER may be needed, depending on the charger's version.
 ② The BC-157S AC ADAPTER or OPC-656 DC POWER CABLE must be purchased separately.
- BC-225** INTELLIGENT DESKTOP CHARGER + **BC-123S** AC ADAPTER
 For rapidly charging of battery packs.
 Charging time: Approximately 2.5 hours for the BP-283
- BC-226** MULTI-CHARGER + **BC-228** AC ADAPTER
 For rapidly charging of up to 6 battery packs simultaneously.
 Charging time: Approximately 4.2 hours for the BP-303
 ① The BC-228 AC ADAPTER must be purchased separately.

◇ DC CABLES

- CP-23L** CIGARETTE LIGHTER CABLE
 Used for charging battery packs through a 12 V cigarette lighter socket. For use with the BC-219.
- OPC-515L**, **OPC-656** DC POWER CABLES
 Used for charging battery packs using a 13.8 V DC power source instead of the power adapter.
 OPC-515L: For the BC-219
 OPC-656: For the BC-214

◇ BELT CLIPS and BELT HANGERS

- MB-133** BELT CLIP
- MB-136** BELT CLIP: Rotating type.
- MB-96F**, **MB-96FL**, **MB-96N** BELT HANGERS

◇ ANTENNAS

- FA-S81VS**, **FA-S82VS**, **FA-S83VS**, **FA-S81US**, **FA-S82US** STUBBY ANTENNAS
 Shorter VHF or UHF antennas.
 FA-S81VS: 136 ~ 150 MHz, FA-S82VS: 148 ~ 162 MHz
 FA-S83VS: 160 ~ 174 MHz, FA-S81US: 400 ~ 450 MHz
 FA-S82US: 450 ~ 490 MHz
- FA-S81V**, **FA-S82V**, **FA-S83V**, **FA-S81U**, **FA-S82U**, **FA-S83U** FLEXIBLE ANTENNAS
 VHF or UHF antennas.
 FA-S81V: 136 ~ 150 MHz, FA-S82V: 148 ~ 162 MHz
 FA-S83V: 160 ~ 174 MHz, FA-S81U: 380 ~ 430 MHz
 FA-S82U: 430 ~ 480 MHz, FA-S83U: 470 ~ 520 MHz
- FA-S67VC**, **FA-S76UC** CUT ANTENNAS
 FA-S67VC: 136 ~ 174 MHz, FA-S76UC: 380 ~ 520 MHz

◇ OTHERS

- AD-118** ACC ADAPTER
 To connect an accessory. See the AD-118 instruction sheet for details of recommended accessories.
CAUTION: The AD-118 does not have waterproof protection. When it is connected, NEVER expose the adapter and the transceiver to rain, snow or any liquids.

- LC-184**, **LC-186** CARRYING CASE
 LC-184: For the Simple key and Ten-key transceivers
 LC-186: For the Non-display transceivers
- VS-4MC** PTT SWITCH CABLE + **HS-94**, **HS-95**, **HS-97** HEADSET
 VS-4MC: To connect a headset to a transceiver. (Non-waterproof)
 HS-94: Ear-hook type
 HS-95: Neck-arm type
 HS-97: Throat microphone
- HM-222**, **HM-222H** SPEAKER MICROPHONE
 With an Emergency key, meets IP68 requirements for dust-tight and waterproof protection.
 HM-222: Speaker microphone
 HM-222H: High audio output type
 ① High audio output is only usable with transceivers that support the function. (With a "U" mark on the serial number label)
- VS-3** Bluetooth® HEADSET
 The Bluetooth headset with a [PTT] switch.
- About the third party Bluetooth® headsets:**
 Icom has checked the PTT operation with some 3M Peltor headsets such as the WS Headset XP, WS ProTac XP and WS Alert XP. (Compatibility not guaranteed.)
- UT-134** AES/DES ENCRYPTION UNIT

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