

OPTIONS

◇ BATTERY PACKS

- **BP-283** Li-ion BATTERY PACK
Voltage: 7.2 V
Capacity: 1910 mAh (minimum), 2010 mAh (typical)
Battery life: Approximately 9 hours
(IC-F7010T/IC-F7010S)
- **BP-284** Li-ion BATTERY PACK
Voltage: 7.2 V
Capacity: 3070 mAh (minimum), 3210 mAh (typical)
Battery life: Approximately 14 hours*¹
(IC-F7010T/IC-F7010S)

*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 battery packs.
Charging time: Approximately 4.5 hours for the BP-284
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 4.6 hours for the BP-284
① The AD-132 CHARGER ADAPTER may be needed, depending on the charger's version.
① The BC-157S AC ADAPTER or OPC-656 DC POWER CABLE must be purchased separately.
- **BC-225** INTELLIGENT DESKTOP CHARGER + **BC-123S** AC ADAPTER
+ **RS-BC225** READER SOFTWARE
For rapidly charging of battery packs.
You can check the charging status using the RS-BC225.
Charging time: Approximately 4.3 hours for the BP-284
① A power adapter may be supplied, depending on the charger's version.
① An USB (Micro-B) cable is required to connect the BC-225 and a PC with the RS-BC225 installed.

◇ DC CABLES

- **CP-23L** CIGARETTE LIGHTER CABLE
Used when charging battery packs through a 12 V cigarette lighter socket. For use with the BC-219.
- **OPC-515L, OPC-656** DC POWER CABLES
Used when 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: 150 ~ 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 ~ 160 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 adaptor and the transceiver to rain, snow or any liquids.

- **LC-184** CARRYING CASE
For the Simple key types and Ten-key types.
- **VS-4MC** PTT SWITCH CABLE
+ **HS-94, HS-95, HS-97** HEADSET
VS-4MC: Used to connect a headset to a transceiver.
HS-94: Ear-hook type
HS-95: Neck-arm type
HS-97: Throat microphone
- **HM-222** SPEAKER MICROPHONE
With an Emergency key.
The HM-222 meets IP68 requirements for waterproof protection.
- **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.)

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

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ICOM INSTRUCTIONS

VHF P25 TRANSCEIVERS IC-F7010T/IC-F7010S UHF P25 TRANSCEIVERS IC-F7020T/IC-F7020S

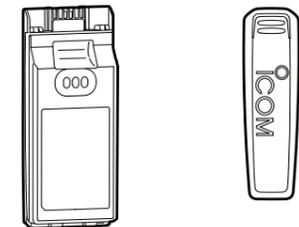
Thank you for choosing this Icom product.
READ ALL INSTRUCTIONS carefully and completely before using this product.

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.

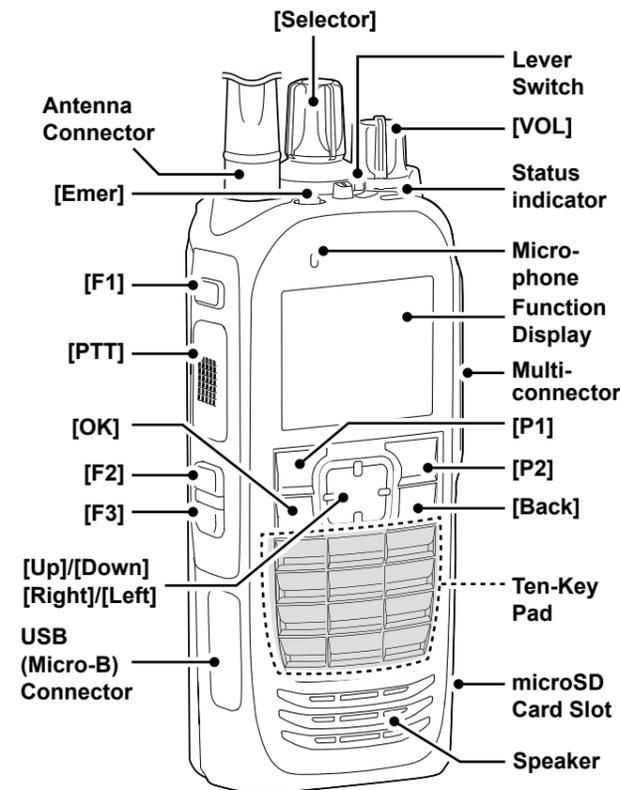
SUPPLIED ACCESSORIES

Battery pack Belt clip



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

PANEL DESCRIPTION



The illustration is of the Ten-key type transceiver.

◇ About the transceiver types

There are 2 types of transceivers.
IC-F7010S, IC-F7020S: Simple key types
IC-F7010T, IC-F7020T: Ten-key types

◇ About the Status indicator

- Lights blue, 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.

◇ About the Multi-connector

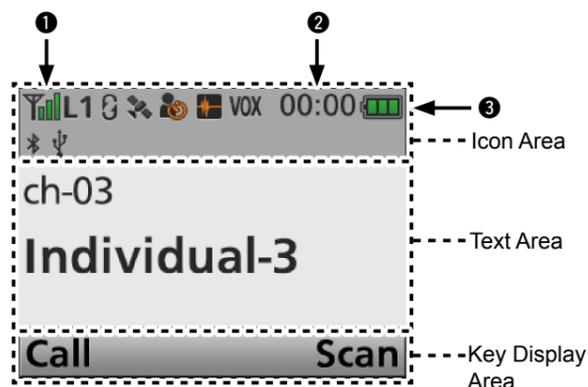
Connects to an optional speaker microphone or headset.

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.

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

1 SIGNAL STRENGTH INDICATOR

Displays the relative receive signal strength level.

2 CLOCK

Displays the current time.

① "AM" or "PM" is displayed beside the time display when 12 hour display format is selected.

3 BATTERY INDICATOR

Displayed or blinks to indicate the battery status.

Indication				
Battery status	Full	Mid	Charging required	Battery exhausted

blinks when the battery is exhausted.

Icons

The following icons are displayed in the Icon Area.

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' (unmute) 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.

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 free space and audio cannot be recorded.

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.

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 a 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.

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:

1. Select a channel.
 - Rotate [Selector] or push [Up] or [Down], depending on the presetting.
2. 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.

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

IMPORTANT:

To maximize the readability of your signal:

1. After pushing [PTT], pause briefly before you start speaking.
2. Hold the microphone 5 to 10 cm (2 to 4 inches) from your mouth, then speak at your normal voice level.

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-219/BC-225

You can rapidly charge the Li-ion battery pack with the BC-219 or BC-225.

Charging time:

BC-219: Approximately 4.5 hours for the BP-284
BC-225: Approximately 4.3 hours for the BP-284

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.
- A USB cable to connect the PC and BC-225 when using the RS-BC225.

CAUTION: NEVER reverse the polarity when connecting the OPC-515L to a power source. This will ruin the battery charger.

White line: ⊕, Black line: ⊖

Rapid charging with the BC-214

You can rapidly charge up to 6 battery packs with the optional BC-214.

Charging time:

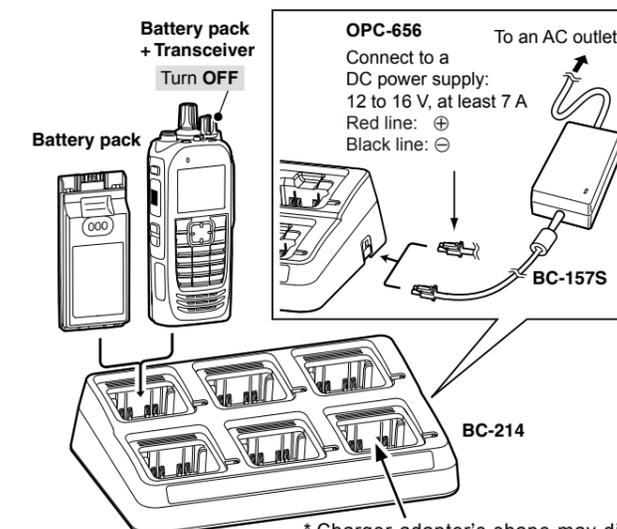
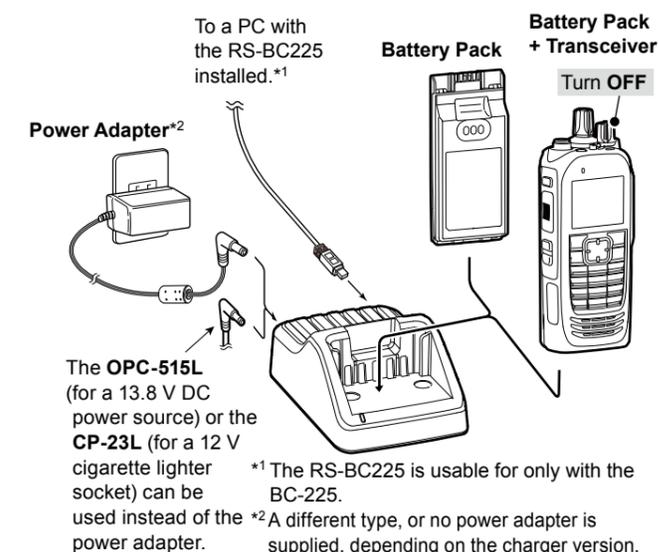
Approximately 4.6 hours for the BP-284

Additionally needed items (purchase separately):

- The BC-157S AC ADAPTER or the OPC-656 DC POWER CABLE
- The AD-132 CHARGER ADAPTER (may be supplied with the charger, depending on the charger version)

CAUTION: NEVER reverse the polarity when connecting the OPC-656 to a power source. This will ruin the battery charger.

Red line: ⊕, Black line: ⊖



* Charger adapter's shape may differ, depending on the charger version.