FOREWORD

Thank you for choosing this Icom product. The IC-M35 VHF MARINE TRANSCEIVER is designed and built with Icom’s state of the art technology and craftsmanship. With proper care this product should provide you with years of trouble-free operation.

IMPORTANT

READ ALL INSTRUCTIONS carefully and completely before using the transceiver.

SAVE THIS INSTRUCTION MANUAL—This instruction manual contains important operating instructions for the IC-M35.

EXPLICIT DEFINITIONS

<table>
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<td>△ DANGER</td>
<td>Personal death, serious injury or an explosion may occur.</td>
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<td>△ WARNING</td>
<td>Personal injury, fire hazard or electric shock may occur.</td>
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<td>Equipment damage may occur.</td>
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<tr>
<td>NOTE</td>
<td>If disregarded, inconvenience only. No risk of personal injury, fire or electric shock.</td>
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FEATURES

☞ Floating on water
The transceiver floats on fresh or salt water even when the supplied accessories are attached.
  • When a third-party battery pack, strap, antenna, etc. is used, it may sink.
  • The battery contacts may be prone to rust if the transceiver is kept floating on the water.

☞ Clear voice boost
The transceiver has the noise detection function which enables automatic volume adjustment and the volume loud function that enables you to maximize the volume level instantly to provide clear communication in the noisy marine environments.

☞ Noise cancelling microphone
The sub-microphone on the rear panel inverts the phase and cancels out the ambient noise from the main microphone. As a result, the transceiver can reduce the influence of the background noise (particularly treble noise) on the transmitted signal.
  • The noise cancellation can produce no effect according to conditions such as loudness and type of noise, or the position and distance between the noise source and the microphone, etc.
  • The noise cancellation does not work when an optional external speaker-microphone is connected.
IN CASE OF EMERGENCY

If your vessel requires assistance, contact other vessels and the Coast Guard by sending a distress call on Channel 16.

○ USING CHANNEL 16

DISTRESS CALL PROCEDURE

1. “MAYDAY MAYDAY MAYDAY.”

2. “THIS IS ................... ” (name of vessel)

3. Your call sign or other indication of the vessel.

4. “LOCATED AT ............... ” (your position)

5. The nature of the distress and assistance required.

6. Any other information which might facilitate the rescue.

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, and/or the charging terminals of the battery pack may rust.

NOTE: If the transceiver’s waterproof protection appears defective, carefully clean it with a soft, wet (fresh water) cloth, then, dry it before operating. The transceiver may lose its waterproof protection if the case or jack cover is cracked or broken, or the transceiver has been dropped.
DANGER! NEVER short 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 transceiver) in handbags, and so on. Simply carrying with or placing near metal objects such as a key, and so on may cause shorting. This may damage not only the battery pack, but also the transceiver.

DANGER! Use and charge only specified Icom battery packs with Icom transceivers or 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 connect the transceiver to an AC outlet. This may pose a fire hazard or result in an electric shock.

WARNING! NEVER hold the transceiver so that the antenna is closer than 2.5 cm from exposed parts of the body, especially the face or eyes, while transmitting. The transceiver will perform best if the microphone is 5 to 10 cm away from the lips and the transceiver is vertical.

CAUTION: MAKE SURE the flexible antenna and battery pack are securely attached to the transceiver, and that the antenna and battery pack are dry before attachment. Exposing the inside of the transceiver to water will result in serious damage to the transceiver. After exposure to water, clean the battery contacts thoroughly with fresh water and dry them completely to remove any water or salt residue.

NEVER connect the transceiver to a power source other than the BP-251 (option) or BP-252. Such a connection will ruin the transceiver.

DO NOT operate or place the transceiver in direct sunlight or in areas with temperatures below –15°C or above +55°C.

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

DO NOT push [PTT] when not actually intending to transmit.

DO NOT modify the transceiver. The transceiver warranty does not cover any problems caused by unauthorized modification.

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

KEEP the transceiver out of the reach of children.

KEEP the transceiver at least 0.9 meters away from your vessel's magnetic navigation compass.
BE CAREFUL! The transceiver’s right-side panel will become hot when operating continuously for long periods of time.

BE CAREFUL! The transceiver meets IPX7* requirements for waterproof protection. However, once the transceiver has been dropped, waterproof protection cannot be guaranteed because of possible damage to the transceiver’s case or the waterproof seal.
* Only when the BP-251 (option) or BP-252, flexible antenna, [SP MIC] cap is attached.

MAKE SURE to turn OFF the transceiver power before connecting or disconnecting the supplied or optional accessory.

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, lightnings, or other natural disasters, disturbances, riots, war, or radioactive contamination.
• The use of Icom transceiver with any equipment that is not manufactured or approved by Icom.

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Priorities
• Read all rules and regulations pertaining to priorities and keep an up-to-date copy handy. Safety and distress calls take priority over all others.

• You must monitor Channel 16 when you are not operating on another channel.

• False or fraudulent distress calls are prohibited under law.

Privacy
• Information overheard but not intended for you cannot lawfully be used in any way.

• Indecent or profane language is prohibited.

Radio licenses
(1) SHIP STATION LICENSE
You must have a current radio station license before using the transceiver. It is unlawful to operate a ship station which is not licensed.

Inquire through your dealer or the appropriate government agency for a Ship-Radiotelephone license application. This government-issued license states the call sign which is your craft’s identification for radio purposes.

(2) OPERATOR’S LICENSE
A Restricted Radiotelephone Operator Permit is the license most often held by small vessel radio operators when a radio is not required for safety purposes.

The Restricted Radiotelephone Operator Permit must be posted or kept with the operator. Only a licensed radio operator may operate a transceiver.

However, non-licensed individuals may talk over a transceiver if a licensed operator starts, supervises, ends the call and makes the necessary log entries.

A current copy of the applicable government rules and regulations is only required to be on hand for vessels in which a radio telephone is compulsory. However, even if you are not required to have these on hand it is your responsibility to be thoroughly acquainted with all pertinent rules and regulations.
Supplied accessories

- **Handstrap**
  Pass the handstrap through the loop on the back side of the transceiver as illustrated at right. This facilitates carrying.

- **Belt clip**
  Attach/detach the belt clip to the transceiver as illustrated below.
  
  To attach the belt clip
  
  To detach the belt clip

Attachments

- **Flexible antenna**
  Connect the supplied flexible antenna to the antenna connector.

  **CAUTION:**
  - **NEVER** carry the transceiver by holding the antenna.
  - Transmitting without an antenna may damage the transceiver.

- **Battery pack**
- **Battery charger** (with 2 screws)
- **Power adapter** (Different type or no power adapter is supplied depending on the version)
- **Antenna**
- **Belt clip**
- **Handstrap**
**Battery pack**

*To remove the battery pack:*
Turn the screw counter clockwise one quarter turn, then pull the battery pack in the direction of the arrow as shown below.

*To attach the battery pack:*
Insert the battery pack in the transceiver completely, then turn the screw clockwise one quarter turn.

**NEVER** remove or insert the battery pack when the transceiver is wet or soiled. This may result water or dust getting into the transceiver/battery pack and may result in the transceiver being damaged.

**NOTE:** When removing or attaching the battery pack, use a coin or standard screwdriver to loosen or tighten the bottom screw.

**CAUTION:**
When attaching or removing a battery pack, make sure the rubber seal is set in the groove of the battery pack correctly. If the seal is not correctly in the groove, it may be damaged when attaching the battery pack. If the seal is damaged, waterproof protection is not guaranteed.

**NOTE:**
When attaching a battery pack, make sure dust or other material does not adhere to the rubber seal. If dust or other material is on the seal when attaching a battery pack, waterproof protection may not be guaranteed.

Make sure the rubber seal (purple) is properly seated in the groove and dust or other material does not adhere to it.
3 PANEL DESCRIPTION

Front, top, side and rear panels

- **ANTENNA CONNECTOR** (p. 2)
  Connects the supplied antenna.

- **SPEAKER-MICROPHONE CONNECTOR [SP MIC]** (p. 25)
  Connects the optional external speaker-microphone.

  **NOTE:** Attach the [SP MIC] cap when the optional speaker-microphone is not used. Otherwise, water will get into the transceiver.

  1. Attach the [SP MIC] cap.
  2. Then rotate it clockwise completely.

- **PTT SWITCH [PTT]**
  Push and hold to transmit; release to receive. (p. 10)

- **CHANNEL 16 KEY [16 C]**
  - Push to select Channel 16. (p. 8)
  - Push and hold for 1 sec. to select the call channel. (p. 8)
  - When the call channel is selected, push and hold for 3 sec. to enter the call channel programming mode. (p. 11)
  - While in the set mode, push to return to the normal condition. (p. 17)
5 **VOLUME/SQUELCH/MONITOR KEY [VOL/SQL MONI]**
- Push to enter the volume adjustment mode and the squelch adjustment mode. (pgs. 11, 12)
- Push to restore the changed volume level by the noise detection, volume loud, or volume mute function to the original. (pgs. 12, 20)
- Push and hold for 1 sec. to activate the monitor function. (p. 13)
- While pushing and holding this key, turn power ON to enter the set mode. (p. 17)
- While in the set mode, push to select an item. (p. 17)

6 **SCAN/DUAL KEY [SCAN DUAL]**
- Push to start or stop normal or priority scan. (p. 15)
- Push and hold for 1 sec. to enter the watch mode. (p. 16)
- Push to exit the watch mode. (p. 16)
- Push and hold this key and [Hi/Lo], to activate the AquaQuake function. (p. 13)

7 **CHANNEL UP/DOWN KEYS [A]/[V]**
- Selects an operating channel. (pgs. 8, 9)
- While in the set mode, selects the setting or value of an item. (p. 17)
- Checks TAG channels or changes scanning direction during scan. (p. 15)

8 **FAVOURITE/TAG KEY [FAV TAG]**
- Push this key to select the favourite (TAG) channels with ignoring untagged channels in a channel group in sequence. (p. 8)
- Push and hold for 1 sec. to set or clear TAG for the displayed channel. (p. 15)
- While pushing and holding this key, turn power ON to clear or set all TAG channels in the selected channel group. (p. 15)

9 **CHANNEL KEY [CH]**
- Push and hold for 1 sec. to select the channel group from U.S.A.*1, International, Canadian*2 and ATIS*3. (p. 9)
- Push to return to the previous channel before selecting channel 16 or the call channel.
  *1 U.K. and China versions only.
  *2 China version only.
  *3 German and Holland versions only.

10 **TRANSMIT POWER/LOCK KEY [Hi/Lo]**
- Push to select the output power from high and low. (p. 10)
- Push and hold for 1 sec. to turn the key lock function ON or OFF. (p. 13)

11 **POWER KEY [ ]**
- Push and hold to turn power ON or OFF.

12 **LOUD/MUTE KEY [LOUD MUTE]**
- Push to turn the volume loud function ON or OFF. (p. 12)
- Push and hold for 1 sec. to turn the volume mute function ON, and push to turn the function OFF. (p. 12)
3 PANEL DESCRIPTION

Function display

1 TRANSMIT INDICATOR (p. 10)
Appears while transmitting.

2 BUSY INDICATOR
Appears when receiving a signal or when the squelch opens. (p. 10)
Blinks while monitoring. (p. 13)

3 TAG CHANNEL INDICATOR (p. 15)
Appears when a TAG channel is selected.

4 CALL CHANNEL INDICATOR (p. 8)
Appears when the call channel is selected.

5 LOCK INDICATOR (p. 13)
Appears while the lock function is activated.

6 BATTERY INDICATOR
Indicates remaining battery power.

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<th>Indication</th>
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<td>Battery level</td>
<td>Full</td>
<td>Middle</td>
<td>Charging required</td>
<td>No battery</td>
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[ ] blinks when the battery is over charged.
[ ] blinks when the battery is exhausted.

7 SCAN INDICATOR (p. 15)
Blinks during scan.

8 DUALWATCH/TRI-WATCH INDICATORS (p. 16)
“DUAL” appears during Dualwatch; “TRI” appears during Tri-watch.

9 DUPLEX INDICATOR
Appears when a duplex channel is selected.

10 SUB CHANNEL READOUT
Indicates Channel 16 during priority scan, Dualwatch or Tri-watch. (p. 16)
Indicates the set mode item while in the set mode. (p. 17)
Indicates the volume level while in the volume adjustment mode. (p. 11)
Indicates the squelch level while in the squelch adjustment mode. (p. 12)
11 SQUELCH LEVEL INDICATOR
Shows the squelch level.

12 VOLUME LEVEL INDICATOR
➡️ Shows the volume level.
➡️ The bars appear in ascending order repeatedly while the volume loud function is activated. (p. 12)
➡️ Blinks while the volume mute function is activated. (p. 12)

13 VOLUME LEVEL ADJUSTING INDICATOR (p. 11)
➡️ Blinks while adjusting the volume level.
➡️ This indicator and the volume level indicator appear alternately while the volume level is turned up by the noise detection function. (p. 20)

14 SQUELCH LEVEL ADJUSTING INDICATOR (p. 12)
Blinks while adjusting the squelch level.

15 CHANNEL NUMBER READOUT
➡️ Indicates the selected operating channel number.
➡️ In the set mode, indicates the selected condition or value. (p. 17)

16 CHANNEL GROUP INDICATOR (p. 9)
“U.S.A.” appears when U.S.A.*1; “INTERNATIONAL” appears when International; “CANADIAN” appears when Canadian*2 channel group is selected.
*1 U.K. and China versions only.
*2 China version only.

17 ATIS INDICATOR (p. 9)
“ATIS” appears when the channel group, which ATIS function is activated, is selected. (Available with German and Holland versions only.)

18 LOW POWER INDICATOR (p. 10)
➡️ “LOW” appears when low power is selected.
➡️ “LOW” blinks when switching forced low power mode because of a high temperature error or low voltage.
BASIC OPERATION

Channel selection

IMPORTANT: Prior to using the transceiver for the first time, the battery pack must be fully charged for optimum life and operation. To avoid damage to the transceiver, turn the power OFF while charging.

Channel 16
Channel 16 is the distress and safety channel. It is used for establishing initial contact with a station and for emergency communications. Channel 16 is monitored during both Dual-watch and Tri-watch. While in the standby condition, you must monitor Channel 16.

2. Push [CH] to return to the channel used before Channel 16, or push [▲]/[▼] to select a channel.

Call channel
Each regular channel group has separate leisure-use call channels. The call channel is monitored during Tri-watch. The call channels can be programmed (p. 11) and are used to store your most often used channel in each channel group for quick recall.

1. Push and hold [16 C] for 1 sec. to select the call channel of the selected channel group.
   • “CALL” and call channel number appear.
   • Each channel group may have an independent call channel after programming a call channel. (p. 11)
2. Push [CH] to return to the channel used before call channel, or push [▲]/[▼] to select a channel.

Convenient!
While pushing and holding [FAV TAG], push [▲]/[▼] to select the favourite (TAG) channels with ignoring untagged channels in the selected channel group in sequence.
• Pushing [FAV TAG] only advances the displayed TAG channel.
• The favourite channels are selected using the TAG channel setting. (p. 15)
**U.S.A., International, Canadian and ATIS channels**

The transceiver is pre-programmed with U.S.A.*1, International, Canadian*2 and ATIS*3 channels. These channel groups may be specified for the operating area.

1. Push [CH] to select a regular channel.
2. Push and hold [CH] for 1 sec. to change the channel group. Repeat to advance to the next group.
   - The usable channel groups are different depending on the versions.
3. Push [▲]/[▼] to select a channel.
   - “DUP” appears for duplex channels.

*1 U.K. and China versions only.
*2 China version only.
*3 German and Holland versions only.

**For U.K. version**

![Diagram showing channel selection process for U.K. version](image)

**For German and Holland versions**

![Diagram showing channel selection process for German and Holland versions](image)

**For China version**

![Diagram showing channel selection process for China version](image)
Receiving and transmitting

**CAUTION:** Transmitting without an antenna may damage the transceiver.

1. Push and hold [节目] to turn power ON.
2. Set the volume and squelch levels.
   - You can enter each adjust mode with [VOL/SQL MONI].
     - Enter the squelch adjustment mode, and push [▼] several times to open the squelch.
     - Enter the volume adjustment mode, then push [▲]/[▼] to adjust the volume level.
     - Enter the squelch adjustment mode again, and push [▲] until the noise disappears.
3. Push [▲]/[▼] to select the desired channel.
   - When receiving a signal, “BUSY” appears and audio is heard from the speaker.
   - Further adjustment of the audio may be necessary at this point.
4. Push [Hi/Lo] to select the output power if necessary.
   - “LOW” appears when low power is selected; no indication when high power is selected.
   - Choose low power for short range communications, choose high power for longer distance communications.
   - Some channels are for low power only.
5. Push and hold [PTT] to transmit, then speak into the microphone.
   - “TX” appears.
   - Channel 70 cannot be used for transmission.

**IMPORTANT:** To maximize the readability of your transmitted signal, pause a few sec. after pushing [PTT], hold the microphone 5 to 10 cm from your mouth and speak into the microphone at a normal voice level.

**NOTE:** The transceiver has a power save function to conserve the battery power. The power save function activates automatically when no signal is received for 5 sec.
Call channel programming

Call channel is used to access Channel 16 (default; may differ according to the version), however, you can program the call channel with your most often-used channels in each channel group for quick recall.

1. Push and hold [CH] for 1 sec. once or twice to select the desired channel group (U.S.A., International, Canadian or ATIS) to be programmed. (p. 9)
2. Push and hold [16 C] for 1 sec. to select the call channel of the selected channel group.
   • “CALL” and call channel number appear.
3. Push and hold [16 C] again for 3 sec. (until a long beep changes to 2 short beeps) to enter the call channel programming mode.
   • Channel number starts blinking.
4. Push [▲]/[▼] to select the desired channel.
5. Push [16 C] to program the displayed channel as the call channel.
   • The channel number stops blinking.

Adjusting the volume level

The volume level can be adjusted with [VOL/SQL MONI] and [▲]/[▼].

1. Push [VOL/SQL MONI] once to enter the volume adjustment mode, then adjust the volume level with [▲]/[▼].
   • “VOL” indicator starts blinking.
   • The transceiver has 31 volume levels and OFF.
   • With no key operation is performed for 5 sec., the transceiver returns to the normal condition.
2. Push [VOL/SQL MONI] twice to exit the volume adjustment mode.
4  BASIC OPERATION

■ Volume loud function

The volume loud function can be activated temporarily by pushing [LOUD MUTE].
\[\text{The function does not work when the volume level is 31.}\]

1. Push [LOUD MUTE] to activate the volume loud function.
   • The volume level is set to the maximum level (level 31).
   • The bars of the volume level indicator appears in ascending order repeatedly.
2. Push [LOUD MUTE] again, or push [VOL/SQL MONI] to turn the volume loud function OFF.

■ Volume mute function

The volume mute function can be activated temporarily by pushing and holding [LOUD MUTE].
\[\text{The function does not work when the volume level is OFF.}\]

1. Push and hold [LOUD MUTE] for 1 sec. to activate the volume mute function.
   • The volume level is set to the minimum level (OFF).
   • The volume level indicator blinks.
2. Push [LOUD MUTE] again, or push [VOL/SQL MONI] to turn the volume mute function OFF.

■ Adjusting the squelch level

The squelch level can be adjusted with [VOL/SQL MONI] and [▲]/[▼].

In order to receive signals properly, as well as for the scan to function effectively, the squelch must be adjusted to the proper level.

1. Push [VOL/SQL MONI] twice to enter the squelch adjustment mode, then adjust the squelch level with [▲]/[▼].
   • “SQL” indicator starts blinking.
   • The transceiver has 11 squelch levels: OP is completely open; 10 is tight squelch; 1 is loose squelch.
   • With no key operation is performed for 5 sec., the transceiver returns to the normal condition.
2. Push [VOL/SQL MONI] again to exit the squelch adjustment mode.

![Indicates the squelch level.]
Blinks while adjusting the squelch level.
■ Lock function

This function electronically locks all keys (except for [PTT], [VOL/SQL MONI], [LOUD MUTE], [Hi/Lo] and [▲]/[▼]) to prevent accidental channel changes and function access.

* In the volume or squelch adjustment mode only.

Push and hold [Hi/Lo] for 1 sec. to turn the lock function ON and OFF.

Appears while the lock function is activated.

Push and hold for 1 sec.

■ Monitor function

The monitor function opens the squelch. The monitor key action can be selected in the set mode. (p. 19)

Push and hold both [SCAN DUAL] and [Hi/Lo] for 1 sec.

“BUSY” blinks and the squelch is opened.

Blinks while the monitor function is activated.

Push and hold for 1 sec.

■ Automatic backlighting

This function lights the function display and keys, and it is convenient for night-time operation. The automatic backlighting can be activated in the set mode. (p. 19)

Push any key except for [PTT] to turn the backlight ON.

• The backlight is automatically turned OFF after 5 sec. of inactivity.

■ AquaQuake water draining function

The AquaQuake water draining function clears water away from the speaker grill. Without this function, water may muffle the sound coming from the speaker. The transceiver emits a vibrating beep when this function is activated.

Push and hold both [SCAN DUAL] and [Hi/Lo].

• A low beep tone sounds for 9 sec. to drain water, regardless of the volume level setting.
• The transceiver never accepts key operation while the AquaQuake function is activated.
• The AquaQuake function cannot be activated when an optional speaker-microphone is connected.
SCAN OPERATION (Except Holland version)

■ Scan types

Scanning is an efficient way to locate signals quickly over a wide frequency range. The transceiver has priority scan and normal scan.

In addition, the auto scan function is available for standby convenience. This function can be activated depending on the setting in the set mode. (p. 18)

Set the TAG channels (scanned channels) before scanning. Clear the TAG for unwanted channels which inconveniently stop scanning, such as those for digital communications. (p. 15)

Choose the desired scan type from "Priority" or "Normal" in the set mode. (p. 18)

Priority scan searches through all TAG channels in sequence while monitoring Channel 16. When a signal is detected on Channel 16, scan pauses until the signal disappears; when a signal is detected on a channel other than Channel 16, scan becomes Dualwatch until the signal disappears.

Normal scan, like priority scan, searches through all TAG channels in sequence. However, unlike priority scan, Channel 16 is not checked unless Channel 16 is set as a TAG channel.
### Setting TAG channels

For more efficient scanning, add the desired channels as TAG channels or clear TAG for unwanted channels. Channels that are not tagged will be skipped during scanning. TAG channels can be assigned to each channel group (U.S.A., International, Canadian and ATIS) independently.

1. Push and hold [CH] for 1 sec. once or twice to select the desired channel group.
2. Select the desired channel to be set as a TAG channel.
3. Push and hold [FAV TAG] for 1 sec. to set the displayed channel as a TAG channel.
   - “TAG” appears on the display.
4. To cancel TAG channel setting, push and hold [FAV TAG] for 1 sec.
   - “TAG” disappears.

✔ **Clearing (or setting) all tagged channels**

While pushing and holding [FAV TAG], turn power ON to clear all TAG channels in the selected channel group.

- Repeat above procedure to set all channels as TAG channels (when no TAG channel has been set.)

### Starting a scan

Set the priority scan function, scan resume timer and auto scan function in advance, using the set mode. (p. 18)

1. Push and hold [CH] for 1 sec. once or twice to select the desired channel group.
2. Push [SCAN DUAL] to start priority or normal scan.
   - “SCAN” blinks in the display.
   - “16” appears on the sub channel readout during priority scan.
   - When a signal is received, scan pauses until the signal disappears or resumes after pausing 5 sec. according to the set mode setting.
   - Push [▲]/[▼] to check which channels have been set as TAG channels, change the scanning direction or resume the scan manually.
3. To stop the scan, push [SCAN DUAL].
   - “SCAN” disappears.
   - Pushing [PTT], [16 C], [CH] or [FAV TAG] also stops the scan.

---

**[Example]: Starting a normal scan.**

*Scan starts* | *When a signal is received*
---|---

![Scan start example](image)
### Description

Dualwatch monitors Channel 16 while you are receiving on another channel; Tri-watch monitors Channel 16 and the call channel while receiving another channel. Dualwatch/Tri-watch is convenient for monitoring Channel 16 when you are operating on another channel.

**DUALWATCH/TRI-WATCH SIMULATION**

<table>
<thead>
<tr>
<th>Channel 16</th>
<th>Channel 88</th>
<th>Channel 16</th>
<th>Channel 88</th>
<th>Channel 88</th>
<th>Channel 20</th>
</tr>
</thead>
</table>

**Dualwatch**
- If a signal is received on Channel 16, Dualwatch/Tri-watch pauses on Channel 16 until the signal disappears.
- If a signal is received on the call channel during Tri-watch, Tri-watch becomes Dualwatch until the signal disappears.

**Tri-watch**
- To transmit on the selected channel during Dualwatch/Tri-watch, push and hold [PTT].

### Operation

1. Select Dualwatch or Tri-watch in the set mode. (p. 19)
2. Select the desired channel.
3. Push and hold [SCAN DUAL] for 1 sec. to start Dualwatch or Tri-watch (depending on the set mode setting).
   - “DUAL” blinks during Dualwatch; “TRI” blinks during Tri-watch.
   - A beep tone sounds when a signal is received on Channel 16.
   - Tri-watch becomes Dualwatch when receiving a signal on the call channel.

**Example**: Operating Tri-watch on INT channel 07.

<table>
<thead>
<tr>
<th>Tri-watch starts.</th>
<th>Signal is received on call channel.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Tri-watch start" /></td>
<td><img src="image2" alt="Call channel signal" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tri-watch resumes after the signal disappears.</th>
<th>Signal received on Channel 16 takes priority.</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image3" alt="Tri-watch activity" /></td>
<td><img src="image4" alt="Channel 16 priority" /></td>
</tr>
</tbody>
</table>
### Set mode programming

Set mode is used to change the conditions of transceiver’s functions: Beep tone function, Priority scan function†, Scan resume timer†, Auto scan function†, Dual/Tri-watch function†, Monitor key action, Automatic backlighting, LCD contrast setting, Power save function, Squelch sensitivity, Low fix function* and Noise detection function.

* Appears only when the optional battery case is attached; not available with German version depending on the pre-setting.
† Not available with Holland version.

<table>
<thead>
<tr>
<th>SET MODE ITEMS</th>
<th>The display shows the current settings, and the selected item is displayed in the dotted circle.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noise detection</td>
<td>• Beep tone</td>
</tr>
<tr>
<td>Starting item</td>
<td></td>
</tr>
<tr>
<td>• Low fix*</td>
<td>• Power save</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Set mode operation

1. Turn power OFF.
2. While pushing [VOL/SQL MONI], turn power ON to enter the set mode.
   - “bP” appears.
3. Push [VOL/SQL MONI], or push [▲]/[▼] while pushing and holding [VOL/SQL MONI] to select the desired item.
4. Push [▲]/[▼] to select the desired condition of the item.
5. To exit the set mode, push [16 C].

*Appears only when the optional battery case is attached; not available with German version depending on the pre-setting.
†Not available with Holland version.
## Set mode items

### Beep tone function

Select the key touch beep sound from ON or US, or turn sound OFF.
- OFF: For silent operation.
- ON: A fixed beep sounds.
- US: The preset beeps (e.g. do, re, mi) sound.

### Priority scan function

(Not available with Holland version)
The transceiver has 2 scan types—normal (OFF) and priority (ON) scans. Normal scan searches all TAG channels in the selected channel group. Priority scan searches all TAG channels in sequence while monitoring Channel 16.

### Scan resume timer

(Not available with Holland version)
The scan resume timer can be set as a pause (OFF) or timer scan (ON).
- OFF: When a signal is detected on a channel, scan pauses on the channel until the signal disappears, and then resumes.
- ON: When a signal is detected on a channel, scan pauses on the channel for 5 sec., and then resumes.

### Auto scan function

(Not available with Holland version)
The auto scan function starts normal or priority scan automatically when no signal is received, and no operation is performed for 30 sec.
**Dual/Tri-watch function**  
“dt”  
(Not available with Holland version)  
This item can be set as Dualwatch or Tri-watch. (p. 16)

- **Dualwatch function**  
- **Tri-watch function**

**Monitor key action**  
“Sq”  
The monitor key opens the squelch temporarily. This item sets the key action.
- **Pu (PUSH)**: The monitor function is activated by pushing and holding [VOL/SQL MONI] for 1 sec. The squelch opens while holding down the key.
- **Ho (HOLD)**: The monitor function is activated by pushing and holding [VOL/SQL MONI] for 1 sec. The squelch stays open until any key is pushed.

**Automatic backighting**  
“bL”  
This function is convenient for night-time operation. The backlight can be selected from ON and OFF.
- The backlight is automatically activated when any key except for [PTT] is pushed.
- The backlight is automatically turned OFF after 5 sec. of inactivity.

**LCD contrast setting**  
“LC”  
Set the LCD contrast level from High contrast and Low contrast.
- The LCD contrast level makes no difference for indoor use.
7 SET MODE

◇ **Power save function**  “PS”
The power save function reduces current drain by deactivating the receiver circuit for preset intervals.
- **OFF**: The power save function is turned OFF.
- **ON**: The power save function is turned ON. The power save function will be activated when no signal is received, and no operation is performed for 5 sec.

◇ **Squelch sensitivity**  “SS”
When this function is turned ON, rejection of noise is improved so that the audio is not easily affected by noise.

◇ **Low fix function**  “LF”
(App appears only when the optional battery case is attached; not available with German version depending on the pre-setting.) When this function is turned ON, the output power is fixed to low except for Channel 16.

◇ **Noise detection function**  “nd”
The noise detection function enables the transceiver to detect the ambient noise while in the standby condition. If the detecting noise and the received signal are stronger than the specific level, the transceiver increases the volume level automatically to suit the environment when receiving a signal.
- When the squelch is open, the transceiver won’t detect noise.
  - **OFF**: The noise detection function is turned OFF.
  - **Low**: When the detecting noise is louder than the specific level, the transceiver turns up the volume.
  - **High**: When the detecting noise is louder than the specific level, the transceiver turns up the volume greater than “Low” setting.
BATTERY CHARGING

Battery caution

Misuse of Lithium-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.

Battery caution

△ DANGER! DO NOT hammer 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 use or leave battery pack in areas with temperatures above +60°C. High temperature buildup in the battery, such as could occur near fires or stoves, inside a sun-heated car, or by setting the battery 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! DO NOT expose the battery to rain, snow, saltwater, or any other liquids. Never charge or use a wet battery. If the battery gets wet, be sure to wipe it dry before using. The battery by itself is not waterproof.

△ DANGER! KEEP battery packs 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 terminals, or NEVER 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 only with the transceiver for which it is specified. Never use a battery with any other equipment, or for any purpose that is not described in this instruction manual.

△ DANGER! If fluid from inside the battery 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 if it emits an abnormal odour, heats up, or is discoloured or deformed. If any of these conditions occur, contact your Icom dealer or distributor.

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

△ WARNING! NEVER put the battery in a microwave oven, high-pressure container, or in an induction heating cooker. This could cause overheating, a fire, or cause the battery to rupture.
CAUTION: Always use the battery within the specific temperature range for the transceiver (–15˚C to +55˚C) and the battery itself (–20˚C to +60˚C). Using the battery out of its specific 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.

CAUTION: Shorter battery life could occur if the battery is left fully charged, completely discharged, or in an excessive temperature environment (above +50˚C) for an extended period of time. If the battery must be left unused for a long time, it must be detached from the transceiver after discharging. You may use the battery until the remaining capacity is about half, then keep it safely in a cool dry place with the temperature range as below:
-20˚C to +50˚C (within a month)
-20˚C to +35˚C (within three months)
-20˚C to +20˚C (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 car, 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! DO NOT charge or leave the battery in the battery charger beyond the specific time for charging. If the battery is not completely charged by the specific time, stop charging and remove the battery from the battery charger. Continuing to charge the battery beyond the specific 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: DO NOT charge the battery outside of the specific temperature range: ±0˚C to +40˚C. Icom recommends charging the battery at +20˚C. The battery may heat up or rupture if charged out of the specific temperature range. Additionally, battery performance or battery life may be reduced.
Supplied battery charger

Charging connections

Do not charge batteries other than the BP-252.

1. Attach the BC-173 to a flat surface, such as a desk, if desired.
2. Connect the power adapter as shown below.
3. Insert the battery pack with/without the transceiver into the charger.
   • The charge indicator lights orange.
   • The charge indicator blinks orange (or orange/green alternately) when the protector is activated.
4. Charge the battery pack approx. 10 hours, depending on the remaining power condition.
   • The charge indicator lights green when charging is completed.

Optional battery case

When you would like to use the optional AAA(LR03) size battery case (BP-251), install the batteries as illustrated below. Be sure to observe the correct polarity.

CAUTION:
• When installing batteries, make sure they are all the same brand, type and capacity. Also, do not mix new and old batteries together.
• Keep battery contacts clean. It’s a good idea to clean battery terminals once a week.
• When using the optional battery case, output power level is 2 W at high. (Depends on the pre-setting for German version.)

NOTE: The transceiver can sink when the optional battery case is attached. (Depends on the weight of the installed batteries.)
Optional battery charger

BC-162 installation

- To a desktop
  Supplied screws
- To a wall
  Supplied screws

For added stability

Charging

1. Connect the power adapter as shown below.
2. Insert the battery pack with/without the transceiver into the charger.
   - The charge indicator lights orange.
   - The charge indicator blinks orange (or red) when the protector is activated.
3. Charge the battery pack approx. 2 hours, depending on the remaining power condition.
   - The charge indicator lights green when charging is completed.

**NOTE:** The battery charger, BC-162, has a charging timer. The timer stops the charging process after 4 hours (approx.).
HM-165 descriptions

Alligator type clip
To attach the speaker-microphone to your shirt or collar, etc.

PTT switch
Transmits during push.
Receives during release.

Microphone

Speaker

Turn the transceiver power OFF when connecting the HM-165.

Attachment

Turn power OFF before attaching the speaker-microphone. Then, insert the speaker-microphone’s connector into the [SP MIC] connector and carefully screw it tight, as shown below. Be careful not to cross-thread the connection.

**IMPORTANT:** KEEP the transceiver’s [SP MIC] cap attached when the speaker-microphone is not in use. If the cover is not attached, water will get into the transceiver. Moreover, the terminals (pins) will become rusty, or the transceiver will function abnormally if the connector gets wet.

**CAUTION:** Attach the speaker-microphone’s connector securely to prevent accidental loss, or water intrusion in the connector.

NEVER immerse the connector in water. If the connector gets wet, be sure to dry it BEFORE attaching it to the transceiver.

**NOTE:** The microphone is located at the top of the speaker-microphone, as shown above. To maximize the readability of your transmitted signal (voice), hold the microphone approx. 5 to 10 cm from your mouth, and speak in a normal voice level.

**NOTE:** When the speaker-microphone is connected to the transceiver, the noise cancellation does not work.
## TROUBLESHOOTING

<table>
<thead>
<tr>
<th>PROBLEM</th>
<th>POSSIBLE CAUSE</th>
<th>SOLUTION</th>
<th>REF.</th>
</tr>
</thead>
<tbody>
<tr>
<td>The transceiver does not turn ON.</td>
<td>• The battery is exhausted.</td>
<td>• Recharge the battery pack.</td>
<td>p. 23</td>
</tr>
<tr>
<td></td>
<td>• The battery pack is not attached correctly.</td>
<td>• Attach the battery pack correctly.</td>
<td>p. 3</td>
</tr>
<tr>
<td>No sound comes from the speaker.</td>
<td>• The squelch level is too high.</td>
<td>• Set the squelch level to the threshold level.</td>
<td>p. 12</td>
</tr>
<tr>
<td></td>
<td>• The volume level is too low.</td>
<td>• Adjust the volume level to a suitable level.</td>
<td>p. 11</td>
</tr>
<tr>
<td></td>
<td>• The speaker has been exposed to water.</td>
<td>• Drain water from the speaker.</td>
<td>p. 13</td>
</tr>
<tr>
<td>Transmitting is impossible, or high power cannot be selected.</td>
<td>• Some channels are for low power or receive only.</td>
<td>• Change channels.</td>
<td>pgs. 8, 9, 27</td>
</tr>
<tr>
<td></td>
<td>• The battery is exhausted.</td>
<td>• Recharge the battery pack.</td>
<td>p. 23</td>
</tr>
<tr>
<td></td>
<td>• The battery is over charged.</td>
<td>• Make sure the battery voltage is correct.</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The output power is set to low.</td>
<td>• Push [Hi/Lo] to select high power.</td>
<td>p. 10</td>
</tr>
<tr>
<td>The displayed channel cannot be changed.</td>
<td>• The lock function is activated.</td>
<td>• Push and hold [Hi/Lo] for 1 sec. to cancel the function.</td>
<td>p. 13</td>
</tr>
<tr>
<td>Scan does not start.</td>
<td>• “TAG” channels are not programmed.</td>
<td>• Set the desired channels as “TAG” channels.</td>
<td>p. 15</td>
</tr>
<tr>
<td>No beep sounds.</td>
<td>• The beep tone function is turned OFF.</td>
<td>• Set the beep tone function to ON (Fix Beep/User Beep) in the set mode.</td>
<td>p. 18</td>
</tr>
<tr>
<td>Battery voltage error.</td>
<td>• The connected battery pack’s voltage is more than 11 V.</td>
<td>• Make sure the battery voltage is correct.</td>
<td>—</td>
</tr>
<tr>
<td>The noise cancellation does not work.</td>
<td>• The sub-microphone is covered with something.</td>
<td>• Make sure the sub-microphone is not covered.</td>
<td>p. 4</td>
</tr>
<tr>
<td></td>
<td>• An optional external speaker-microphone is connected.</td>
<td>• Disconnect the microphone.</td>
<td>p. 25</td>
</tr>
<tr>
<td>The noise detection function does not work.</td>
<td>• The sub-microphone is covered with something.</td>
<td>• Make sure the sub-microphone is not covered.</td>
<td>p. 4</td>
</tr>
<tr>
<td></td>
<td>• The squelch is open.</td>
<td>• Set the squelch level to the desired level.</td>
<td>p. 12</td>
</tr>
</tbody>
</table>
### VHF MARINE CHANNEL LIST

#### International channels

<table>
<thead>
<tr>
<th>CH</th>
<th>Frequency (MHz)</th>
<th>CH</th>
<th>Frequency (MHz)</th>
<th>CH</th>
<th>Frequency (MHz)</th>
<th>CH</th>
<th>Frequency (MHz)</th>
<th>CH</th>
<th>Frequency (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>156.050</td>
<td>11</td>
<td>156.550</td>
<td>21</td>
<td>157.050</td>
<td>62</td>
<td>156.125</td>
<td>72</td>
<td>156.625</td>
</tr>
<tr>
<td>02</td>
<td>156.100</td>
<td>12</td>
<td>156.600</td>
<td>22</td>
<td>157.100</td>
<td>63</td>
<td>156.175</td>
<td>73</td>
<td>156.675</td>
</tr>
<tr>
<td>03</td>
<td>156.150</td>
<td>13</td>
<td>156.650</td>
<td>23</td>
<td>157.150</td>
<td>64</td>
<td>156.225</td>
<td>74</td>
<td>156.725</td>
</tr>
<tr>
<td>04</td>
<td>156.200</td>
<td>14</td>
<td>156.700</td>
<td>24</td>
<td>157.200</td>
<td>65</td>
<td>156.275</td>
<td>75</td>
<td>156.775</td>
</tr>
<tr>
<td>05</td>
<td>156.250</td>
<td>15</td>
<td>156.750</td>
<td>25</td>
<td>157.250</td>
<td>66</td>
<td>156.325</td>
<td>76</td>
<td>156.825</td>
</tr>
<tr>
<td>06</td>
<td>156.300</td>
<td>16</td>
<td>156.800</td>
<td>26</td>
<td>157.300</td>
<td>67</td>
<td>156.375</td>
<td>77</td>
<td>156.875</td>
</tr>
<tr>
<td>07</td>
<td>156.350</td>
<td>17</td>
<td>156.850</td>
<td>27</td>
<td>157.350</td>
<td>68</td>
<td>156.425</td>
<td>78</td>
<td>156.925</td>
</tr>
<tr>
<td>08</td>
<td>156.400</td>
<td>18</td>
<td>156.900</td>
<td>28</td>
<td>157.400</td>
<td>69</td>
<td>156.475</td>
<td>79</td>
<td>156.975</td>
</tr>
<tr>
<td>09</td>
<td>156.450</td>
<td>19</td>
<td>156.950</td>
<td>60</td>
<td>156.025</td>
<td>70</td>
<td>Rx only</td>
<td>80</td>
<td>157.025</td>
</tr>
<tr>
<td>10</td>
<td>156.500</td>
<td>20</td>
<td>157.000</td>
<td>61</td>
<td>156.075</td>
<td>71</td>
<td>156.575</td>
<td>81</td>
<td>157.075</td>
</tr>
</tbody>
</table>

*1 Channels 15 and 17 may also be used for on-board communications provided the effective radiated power does not exceed 1 W, and subject to the national regulations of the administration concerned when these channels are used in its territorial waters.

*2 The output power of channels 75 and 76 are limited to low power (1 W) only. The use of these channels should be restricted to navigation-related communications only and all precautions should be taken to avoid harmful interference to channel 16, e.g. by means geographical separation.
## 11 VHF MARINE CHANNEL LIST

### USA channels (for U.K. and China versions)

<table>
<thead>
<tr>
<th>CH</th>
<th>Frequency (MHz)</th>
<th>CH</th>
<th>Frequency (MHz)</th>
<th>CH</th>
<th>Frequency (MHz)</th>
<th>CH</th>
<th>Frequency (MHz)</th>
<th>CH</th>
<th>Frequency (MHz)</th>
<th>CH</th>
<th>Frequency (MHz)</th>
<th>CH</th>
<th>Frequency (MHz)</th>
</tr>
</thead>
<tbody>
<tr>
<td>01A</td>
<td>156.050</td>
<td>156.050</td>
<td>22A</td>
<td>157.100</td>
<td>157.100</td>
<td>64A</td>
<td>156.225</td>
<td>156.225</td>
<td>75**</td>
<td>156.775</td>
<td>156.775</td>
<td>85</td>
<td>157.275</td>
</tr>
<tr>
<td>—</td>
<td>—</td>
<td>—</td>
<td>13*</td>
<td>156.650</td>
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*1 Low power only.

*2 UK marina channels: M1=37A (Tx/Rx: 157.850 MHz), M2=P4 (Tx/Rx: 161.425 MHz) for U.K. version only.

**NOTE:** Simplex channels, 3, 21, 23, 61, 64, 81, 82 and 83 **CANNOT** be lawfully used by the general public in U.S.A. waters.
### Canadian channels (China version only)

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</table>

*Low power only.
### GENERAL
- **Frequency coverage**: Transmit 156.000–161.450 MHz, Receive 156.000–163.425 MHz
- **Mode**: FM (16K0G3E)
- **Channel spacing**: 25 kHz
- **Power supply requirement**: BP-251 and BP-252 only
- **Current drain (at 7.4 V DC)**
  - TX at 6 W: 1.5 A typical
  - TX at 5 W: 1.3 A typical
  - TX at 1 W: 0.7 A typical
  - TX at 0.5 W: 0.6 A typical
  - RX Max. audio
    - Internal speaker: 0.3 A typical
    - External speaker: 0.2 A typical
  - Power save: 10 mA typical
- **Frequency stability**: ±1.5 kHz
- **Operating temperature range**: –15°C to +55°C
- **Dimensions**: 62 (W) × 139.5 (H) × 43 (D) mm
  (Projections not included)
- **Weight**: Approx. 295 g
  (incl. BP-252, FA-SC58V and MB-109)

### TRANSMITTER
- **Output power (at 7.4 V DC)**: 6 W (High) and 1 W (Low)*
  - *5 W (High) and 1 W (Low) for Australian version
  - 1 W (High) and 0.5 W (Low) for German version depending on the pre-setting
- **Modulation system**: Variable reactance frequency modulation
- **Maximum frequency deviation**: ±5 kHz
- **Adjacent channel power**: 70 dB
- **Spurious emissions**: 0.25 µW

### RECEIVER
- **Receive system**: Double-conversion superheterodyne
- **Sensitivity (20 dB SINAD)**: –2 dBµ emf typical
- **Squelch sensitivity**: –6 dBµ emf typical (at threshold)
- **Intermodulation**: 68 dB
- **Spurious response**: 70 dB*
  *65 dB for Australian version
- **Adjacent channel selectivity**: 70 dB
- **Audio output power (at 10% distortion)**
  - Internal speaker: 0.7 W typical with a 16 Ω load
  - External speaker: 0.2 W with an 8 Ω load

All stated specifications are subject to change without notice or obligation.
◊ BATTERY CASE AND PACK
• BP-251 BATTERY CASE
  Battery case for 5 × AAA (LR03) alkaline cells.
  Output power level: 2 W at high (Depends on the pre-setting for
  German version.)
• BP-252 Li-ion BATTERY PACK
  Voltage : 7.4 V
  Capacity : 950 mAh (minimum) / 980 mAh (typical)

◊ CHARGERS
• BC-173 DESKTOP CHARGER + BC-147S AC ADAPTER
  Used for regular charging of battery pack. The power adapter, BC-
  147S, is not supplied with some versions.
  Charging time : approx. 10 hours
• BC-162 DESKTOP CHARGER + BC-145S AC ADAPTER
  Used for rapid charging of battery pack. The power adapter, BC-
  145S, is not supplied with some versions.
  Charging time : approx. 2 hours.

◊ BELT CLIP
• MB-109 BELT CLIP

◊ OTHER OPTIONS
• HM-165 SPEAKER-MICROPHONE
  Full sized speaker-microphone including an alligator clip to attach
  the microphone to your shirt, collar, etc. The HM-165 meets IPX7*
  requirements for waterproof protection.
• FA-SC58V ANTENNA

* Once the item has been dropped, the IP rating cannot be guaran-
teed because of possible damage to the case or the waterproof
seal.

Approved Icom optional equipment is designed for optimal perform-
ance 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.

Some options may not be available in some countries. Please ask
your dealer for details.
Country code list

- ISO 3166-1

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<th>Codes</th>
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<td>BG</td>
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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.
Count on us!