



INSTRUCTION MANUAL

SURVIVAL CRAFT 2-WAY RADIO IC-GM1600

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

Icom Inc.



SAFETY TRAINING INFORMATION



Your Icom radio generates RF electromagnetic energy during transmit mode.

This radio has been evaluated for compliance at the distance of 2.5 cm with the FCC 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:

- FCC OET Bulletin 65 Edition 97-01 Supplement C, Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields.
- American National Standards Institute (C95.1-1992), IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz.
- American National Standards Institute (C95.3-1992), IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields— RF and Microwave.
- The following accessories are authorized for use with this product. Use of accessories other than those specified may result in RF exposure levels exceeding the FCC requirements for wireless RF exposure.: Belt Clip (MB-86, MB-103Y), Rechargeable Li-ion Battery Pack (BP-252) and Lithium Battery Pack (BP-234).



To ensure that your exposure to RF electromagnetic energy is within the FCC allowable limits for occupational use, always adhere to the following guidelines:

- **DO NOT** operate the radio without a proper antenna attached, as this may damage the radio and may exceed FCC 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 total radio use time (“50% duty cycle”). Transmitting more than 50% of the time can cause FCC RF exposure compliance requirements to be exceeded. The radio is transmitting when the “TX indicator” light is red. You can cause the radio to transmit by pressing 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 which are listed on page 23 when attaching the radio to your belt, etc., to ensure FCC RF exposure compliance requirements are not exceeded. To provide the recipients of your transmission the best sound quality, hold the radio in an almost vertical position at least 5 cm (2 inches) from your mouth, the microphone is located next to the speaker, so you should “talk into the speaker”.

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 FCC RF exposure limits.

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.

INFORMATION EN MATIÈRE DE SÉCURITÉ



AVERTISSEMENT

Votre radio Icom produit une énergie électromagnétique de radiofréquences (RF), en mode de transmission. Elle est conçue pour une «utilisation grand public», dans un environnement non contrôlé. Cet appareil a été évalué et jugé conforme, à 2,5 cm, aux limites d'exposition aux RF de la FCC, pour une «utilisation grand public». En outre, votre radio Icom satisfait les normes et directives qui suivent en matière de niveaux d'énergie et d'énergie électromagnétique de RF et d'évaluation de tels niveaux en ce qui concerne l'exposition humaine :

- Supplément C, édition 01-01, du Bulletin OET de la FCC, «Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields».
- Norme de l'American National Standards Institute (ANSI) : IEEE C95.1-1992 sur les niveaux de sécurité compatibles avec l'exposition humaine aux champs électromagnétiques de radiofréquences (3 kHz à 300 GHz).
- Norme de l'ANSI : IEEE C95.3-1992 sur la méthode d'évaluation recommandée du champ magnétique potentiellement dangereux des radiofréquences et des micro-ondes.
- Les accessoires qui suivent sont approuvés pour une utilisation avec ce produit. L'utilisation d'accessoires autres que ceux précisés peut entraîner des niveaux d'exposition aux RF supérieures aux limites établies par la FCC en matière d'exposition aux RF sans fil; attache pour ceinture (MB-86, MP-103Y), bloc-piles rechargeable au lithium-ion (BP-252).



MISE EN GARDE

CAUTION

Afin de vous assurer que votre exposition à une énergie électromagnétique de RF se situe dans les limites permises par la FCC pour une utilisation grand public, veuillez en tout temps respecter les directives suivantes :

- **NE PAS** faire fonctionner la radio sans qu'une antenne appropriée y soit fixée, car ceci risque d'endommager la radio et causer une exposition supérieure aux limites établies par la FCC. L'antenne appropriée est celle qui est fournie avec cette radio par le fabricant ou une antenne spécialement autorisée par le fabricant pour être utilisée avec cette radio.
- **NE PAS** émettre pendant plus de 50% du temps total d'utilisation de l'appareil («50% du facteur d'utilisation»). Émettre pendant plus de 50% du temps total d'utilisation peut causer une exposition aux RF supérieure aux limites établies par la FCC. La radio est en train d'émettre lorsque le témoin du mode de transmission s'affiche sur l'écran ACL. La radio émettra si vous appuyez sur le bouton du microphone.
- **TOUJOURS** tenir l'antenne éloignée d'au moins 2,5 cm de votre corps au moment d'émettre et utiliser uniquement l'attache pour ceinture Icom illustrée à la p. 23, lorsque vous attachez la radio à votre ceinture, ou à autre chose, de façon à vous assurer de ne pas provoquer une exposition aux RF supérieure aux limites fixées par la FCC. Pour offrir à vos interlocuteurs la meilleure qualité de transmission possible, tenez l'antenne à au moins 5 cm de votre bouche et légèrement de côté.

Les renseignements ci-dessus fournissent à l'utilisateur toute l'information nécessaire sur l'exposition aux RF et sur ce qu'il faut faire pour assurer que cette radio fonctionne en respectant les limites d'exposition aux RF établies par la FCC.

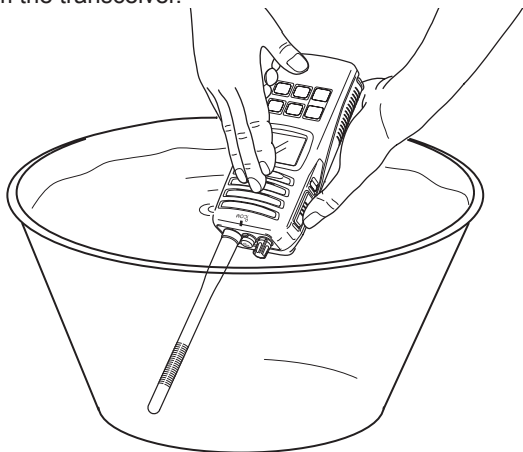
Interférence électromagnétique et compatibilité

En mode de transmission, votre radio Icom produit de l'énergie de RF qui peut provoquer des interférences avec d'autres appareils ou systèmes. Pour éviter de telles interférences, mettez la radio hors tension dans les secteurs où une signalisation l'exige. **NE PAS** faire fonctionner l'émetteur dans des secteurs sensibles au rayonnement électromagnétique tels que les hôpitaux, les aéronefs et les sites de dynamitage.

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: DO NOT wash the transceiver in water if there is any reason to suspect the waterproofing may not be effective. For example, in cases where the [MIC/SP] jack cover is damaged, the transceiver/battery pack is cracked or broken, or has been dropped, or when the battery pack is detached from the transceiver.



PREFACE

Thank you for choosing this Icom product. The IC-GM1600 SURVIVAL CRAFT 2-WAY RADIO 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-GM1600.

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

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

EXPLICIT DEFINITIONS

WORD	DEFINITION
 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.

PRECAUTION

⚠ WARNING! NEVER connect the transceiver directly 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 very close to, or touching 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 (2 to 4 inches) away from the lips and the transceiver is vertical.

⚠ WARNING! NEVER connect the transceiver to a power source other than the BP-252 or BP-234. This could cause a fire or damage the transceiver.

CAUTION: DO NOT place or leave the transceiver in direct sunlight or in places with temperatures below -20°C (-4°F) or above $+60^{\circ}\text{C}$ ($+140^{\circ}\text{F}$) for U.S.A. version; -20°C (-4°F) or above $+55^{\circ}\text{C}$ ($+131^{\circ}\text{F}$) for General version.

CAUTION: DO NOT attach the battery unless the flexible antenna, battery pack and jack cover are securely attached to the transceiver. Confirm that the antenna and battery pack are dry before attaching. Exposing the inside of the transceiver to dust or water can cause serious damage to the transceiver.

PLACE the transceiver in a secure place to avoid inadvertent use by unauthorized persons.

KEEP the transceiver and microphone at least 0.9 m (3 feet) away from the vessel's magnetic navigation compass.

NOTE:

- According to IMO resolution MSC. 149 (77) (adopted on 3 June 2003), the following regulation has been executed.
- "The equipment should have provisions for its attachment to the clothing of the user and also be provided with a wrist or neckstrap. For safety reasons, the strap should include a suitable weak link to prevent the bearer from being ensnared."
- Instead of the handstrap, a neckstrap is supplied with the equipment on or after 1st July, 2005.

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FCC INFORMATION

FOR CLASS A UNINTENTIONAL RADIATORS

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.

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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

When your craft is equipped with a VHF FM transceiver, 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. This license includes 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 near the transceiver or be 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.

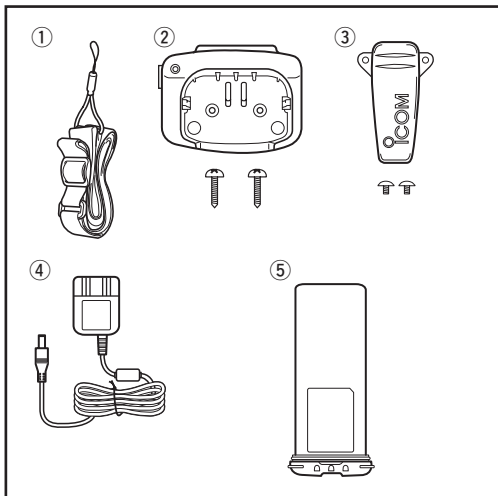
A current copy of the applicable government rules and regulations is only required to be on hand for vessels in which a radio telephone is compulsory. However, even if you are not required to have these on hand it is your responsibility to be thoroughly acquainted with all pertinent rules and regulations.

■ Supplied accessories

The following accessories are supplied:

	Qty.
① Neckstrap.....	1
② Battery charger (BC-173).....	1
③ Belt clip (MB-103Y).....	1
④ Power adapter (BC-147SA/SE)*.....	1
⑤ Li-ion battery pack (BP-252).....	1

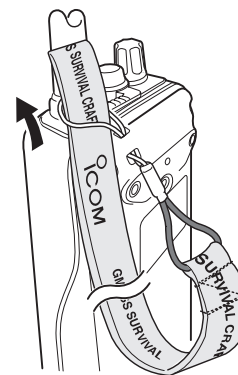
*May not be supplied, or a different type may be supplied, depending on the transceiver version.



■ Attachments

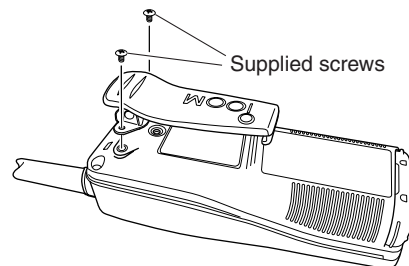
◇ Neckstrap

Pass the neckstrap through the loop on the top of the transceiver as illustrated at right.



◇ Belt clip

Attach the belt clip to the transceiver as shown below.



◇ Battery pack

To remove the battery pack:

Turn the lock screw counterclockwise, then pull the battery pack in the direction of the arrow as shown below.

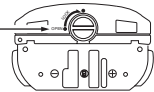
To attach the battery pack:

Insert the battery pack into the IC-GM1600 completely, then turn the lock screw clockwise.

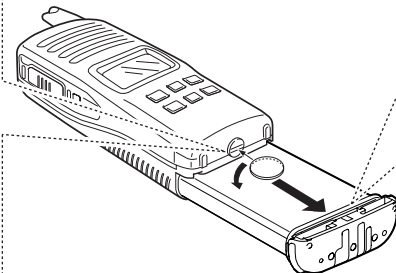
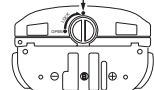
NEVER remove or insert the battery pack when the transceiver is wet or soiled. This may result in water or dust getting into the transceiver and battery pack, and may result in them being damaged.

NOTE: When the lock screw does not easily turn (feels tight), check to ensure the battery pack is correctly inserted to the transceiver. **DO NOT** strike or otherwise impact the battery, as this may damage the battery pack or the transceiver.

Screw position for removing



Screw position for attaching



BE CAREFUL!: The latch is tightly locked, so use caution when releasing it. **DO NOT** use your fingernail. Use the edge of a coin or screwdriver tip to carefully release it.

CAUTION!:

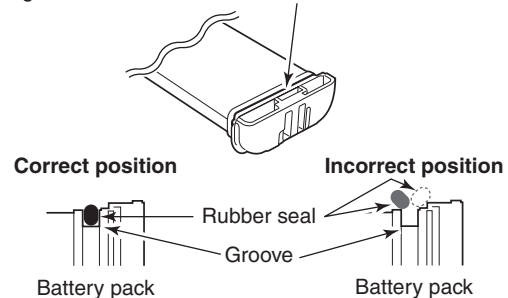
When attaching or removing a battery pack, make sure the rubber seal is set in the groove of the battery pack correctly. If the seal is not neatly in the groove it may be damaged when attaching the battery pack.

If the seal is damaged, waterproofing is not guaranteed.

NOTE:

When attaching a battery pack, make sure dust or else does not adhere to the rubber seal. If dust or anything else is on the seal when attaching a battery pack, the water resistant seal may be compromised.

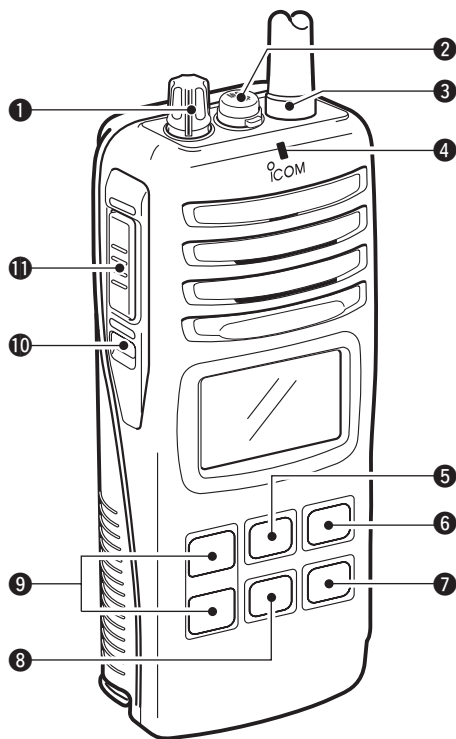
Make sure both the rubber seal (purple) is correctly set into the groove and dust or else does not adhere to it.



3

PANEL DESCRIPTION

■ Front, top and side panels



① VOLUME CONTROL [VOL]

Turns power ON and adjusts the audio level.

② MICROPHONE CONNECTOR [MIC/SP]

Connects an optional external microphone.

NOTE: Attach the jack cover when the optional speaker microphone is not used. Otherwise, water may get into the transceiver.

③ ANTENNA

Fixed type.

④ TRANSMIT/RECEIVE INDICATOR

Lights green while receiving a signal or when the squelch is open. Lights red while transmitting.

⑤ CALL CHANNEL KEY [CALL]

➡ Push to select the Call channel. (p. 7)

• Channel 9* is factory default.

*Channel 16 is set as factory default by version.

➡ Hold down for 3 seconds to enter the call channel programming mode. (p. 9)

⑥ CHANNEL KEY [CH]

Push to return the previous condition when the distress channel or call channel is selected. (p. 7)

⑦ TRANSMIT POWER/LOCK KEY [Hi/Lo• 🔒]

➡ Push to select high or low power. (p. 8)

➡ Hold down for 1 second to turn the lock function ON or OFF. (p. 10)

Count on us!

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