## O ICOM

#### **INSTRUCTION MANUAL**

VHF MARINE TRANSCEIVER
IC-M25
IC-M25EURO
EVO

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.

## **■** 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-M25/IC-M25EURO.

This instruction manual includes some functions that are usable only when they are preset by your dealer. Ask your dealer for details

#### ■ Features

- USB Type-C charging port
- 14 hours of operation in the Eco Mode
- Float'n Flash:

Floats and flashes on the water, even if the transceiver is turned OFF.

- ① You can set whether the transceiver flashes or sounds an alarm when it floats on the water.
- 5 W RF output power
- Powerful 700 mW audio output for clear communication
- IPX7\* waterproof construction
   \*Only when the supplied antenna and covers are attached

## Explicit definitions

WORD	DEFINITION
<b>∆DANGER!</b>	Personal death, serious injury or an explosion may occur.
<b>∆WARNING!</b>	Personal injury, fire hazard or electric shock may occur.
CAUTION	Equipment damage may occur.
NOTE	Recommended for optimum use. No risk of personal injury, fire or electric shock.

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.

Icom and the Icom Iogo 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.

AQUAQUAKE is a trademark of Icom Incorporated.

All other products or brands are registered trademarks or trademarks of their respective holders.

## ■ In case of emergency

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

- 1. Push [16/C] to switch to Channel 16.
- 2. While holding down [PTT], give the appropriate information as follows:

F	• "MAYDAY MAYDAY MAYDAY."
ŀ	● "THIS IS" (name of vessel).
ŀ	Say your call sign or other indication of the vessel.
ŀ	● "LOCATED AT" (your position).
ŀ	State the nature of the distress and assistance required.
ŀ	Give any other information which might facilitate the rescue.

#### ■ 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 and switch may become unusable, due to salt crystallization.

**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 covers are cracked or broken, or the transceiver has been dropped. Contact your Icom distributor or your dealer for advice.

Information:					
In this instruction	In this instruction manual, the transceiver version names are described as shown below.				
U.S.A.:	USA				
Export:	EXP				
Europe:	EUR				
German:	FRG				
Netherlands:	NLD				
U.K.:	UK				
Australia:	AUS				

# BASIC MANUAL

#### Precautions

⚠ **DANGER! NEVER** operate the transceiver near unshielded electrical blasting caps or in an explosive atmosphere. This could cause an explosion and death.

⚠ WARNING! 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 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.

⚠ 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.

**CAUTION: DO NOT** use harsh solvents such as Benzine or alcohol when cleaning. This could damage the equipment surfaces. If the surface becomes dusty or dirty, wipe it clean with a soft, dry cloth.

**CAUTION: DO NOT** place or leave the transceiver in excessively dusty environments. This could damage the transceiver.

**NOTE: DO NOT** use or leave the transceiver in direct sunlight or in areas outside of the specified temperature range: IC-M25:  $-20^{\circ}\text{C} (-4^{\circ}\text{F}) \sim +60^{\circ}\text{C} (+140^{\circ}\text{F})$  IC-M25EURO:  $-15^{\circ}\text{C} (5^{\circ}\text{F}) \sim +55^{\circ}\text{C} (131^{\circ}\text{F})$  IC-M25EURO (AUS):

 $-10^{\circ}$ C (14°F) ~ +55°C (131°F)

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

BE CAREFUL! The transceiver meets IPX7 requirements for waterproof protection. However, once the transceiver has been dropped, waterproof protection cannot be guaranteed due to the fact that the transceiver may be cracked, or the waterproof seal damaged, and so on.

\* Only when the covers are attached.

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

**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.

#### ■ Précautions

⚠ DANGER! NE JAMAIS utiliser l'émetteur-récepteur à proximité de détonateurs électriques non blindés ou dans une atmosphère explosive. Cela pourrait causer une explosion mortelle.

AVERTISSEMENT! N'utilisez

JAMAIS et ne rechargez JAMAIS des
blocs-batteries Icom avec des émetteursrécepteurs non-Icom ou des chargeurs
non-Icom. Seuls les blocs-batteries Icom
sont testés et homologués pour être
utilisés avec des émetteurs-récepteurs
Icom ou pour être rechargés avec des
chargeurs Icom. L'utilisation de blocsbatteries ou de chargeurs tiers ou de
contrefaçon peut être à l'origine de
fumées, d'incendie ou peut faire éclater la
batterie

⚠ AVERTISSEMENT ! NE JAMAIS
l'émetteur-récepteur de sorte que l'antenne
soit très proche des parties exposées du
corps, en particulier du visage ou des
yeux, et ne les touche pas pendant la
transmission.

⚠ AVERTISSEMENT! N'utilisez JAMAIS l'émetteur-récepteur avec un casque ou d'autres accessoires audio à des niveaux de volume élevés. Le fonctionnement continu à volume élevé peut provoquer une sonnerie dans vos oreilles. Si vous ressentez la sonnerie, réduisez le volume ou cessez d'utiliser.

MISE EN GARDE: NE PAS utiliser de dissolvants agressifs tels que du Benzène ou de l'alcool lors du nettoyage, car ils endommageraient les surfaces de l'émetteur-récepteur. Si l'émetteurrécepteur est poussiéreux ou sale, nettoyez-le avec un tissu doux et sec.

MISE EN GARDE: NE PAS placer l'émetteur-récepteur dans des environnements excessivement poussiéreux. Cela pourrait endommager l'émetteur-récepteur.

**REMARQUE : NE PAS** utiliser ou laisser l'émetteur-récepteur en plein soleil ou dans un environnement soumis à des températures inférieures à -20°C (-4°F) ou supérieures à +60°C (+140°F).

**NE** placez **JAMAIS** l'appareil dans un endroit non sécurisé pour éviter toute utilisation par des personnes non autorisées.

MISE EN GARDE : Cet émetteur-récepteur répond aux exigences de la norme IPX7 en matière de protection étanche. Cependant, en cas de chute de l'émetteur-récepteur, la protection étanche ne peuvent plus être garanties, car le boitier risque d'être fissuré ou le joint d'étanchéité endommagé, etc. \* Uniquement lorsque les couvercles sont

**NE PAS** appuyer sur la touche PTT sans intention réelle d'émettre.

fixés.

NE PAS modifier l'émetteur-récepteur. Les spécifications peuvent changer et l'émetteur-récepteur peut ainsi ne plus être conforme aux exigences imposées par la réglementation. La garantie de l'émetteurrécepteur ne couvre pas les problèmes résultant d'une modification non autorisée.

#### ■ About CE and DOC

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Hereby, Icom Inc. declares that the versions of IC-M25EURO 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/

These versions also comply with the essential requirements of the Battery Regulation, (EU) 2023/1542.

#### **■** About UKCA DOC

To obtain the UKCA Declaration of Conformity, please contact Icom UK Limited by email at info@icomuk.co.uk or alternatively call + 44(0) 1227 741741.

## ■ Disposal



The crossed-out wheeledbin 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.

## 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 ISED 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 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.
- 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 accessories listed on page 21 are authorized for use with this product. Use of accessories other than those specified may result in RF exposure levels exceeding the FCC and ISED 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 expose to RF electromagnetic energy is within the FCC and ISED allowable limits for occupational use, always adhere to the following quidelines:

- DO NOT operate the radio without a proper antenna attached, as this may damage the radio and may also cause you to exceed FCC and ISED 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 ISED RF exposure compliance requirements to be exceeded. The radio is transmitting when "TX" is displayed on the function display. 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 on page 21 when attaching the radio to your belt, or other place, to ensure FCC and ISED 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 ISED 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.

## Information en matiére de sécurité



Votre radio Icom produit une énergie électromagnétique de radiofréquences (RF), en mode de transmission. Cette radio est concue

AVERTISSEMENT pour un « usage professionnel seulement » et classée comme tel, ce qui signifie qu'elle doit être utilisée uniquement dans le cadre d'un travail par des personnes conscientes des dangers et des mesures visant à minimiser ces dangers. Elle N'EST PAS concue pour une «utilisation grand public », dans un environnement non contrôlé. Cet appareil a été évalué et jugé conforme, aux limites d'exposition aux RF de la FCC et d'ISDE, 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:

- Publication 447498 D03 de la FCC KDB. « Evaluating Compliance with FCC Guidelines for Human Exposure to Radio Frequency Electromagnetic Fields ».
- Norme de l'American National Standards Institute (ANSI): IEEE C95.1-2019 pour les niveaux de sécurité en ce qui concerne l'exposition humaine aux champs électriques, magnétiques et électromagnétiques. 0 Hz à 300 GHz.
- Norme de l'ANSI: IEEE C95.3-2021 pratique recommandée par l'IEEE pour les mesures et les calculs de champs électriques. magnétiques et électromagnétiques en ce qui concerne l'exposition humaine à de tels champs. 0 Hz à 300 GHz.
- · Les accessoires illustrés à la p. 21 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 et d'ISDE en matière d'exposition aux RF sans fil.
- · Le Code de sécurité 6 de Santé Canada -Les limites d'exposition humaine à l'énergie électromagnétique dans la gamme de fréquences de 3 kHz à 300 GHz.



Afin de vous assurer que votre exposition à une énergie électromagnétique de RF se situe dans les limites permises MISE EN GARDE par la FCC et d'ISDE 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 et d'ISDE. 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 et d'ISDE. La radio est en train d'émettre lorsque le témoin du « TX » 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. 21, lorsque vous attachez la radio à votre ceinture, ou à autre chose, de facon à vous assurer de ne pas provoquer une exposition aux RF supérieure aux limites fixées par la FCC et d'ISDF

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 et d'ISDE.

#### Interférence électromagnétique et compatibilité

En mode de transmission, votre radio Icom produit de l'énergie de RF qui peut provoguer 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.

#### Usage professionnel/contrôlé

Ce radio émetteur est utilisé dans des cas où des personnes sont exposées en raison de leur travail, pourvu qu'elles soient conscientes du risque d'expositionet qu'elles puissent exercer un contrôle sur cette exposition.

#### **■** 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.

#### ♦ FCC SDoC

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

Model Name: IC-M25

#### Responsible Party:

Company Name: Icom America Inc. Address: 12421 Willows Road NE Kirkland, WA 98034

#### **U.S. Contact Information:**

800-USA-ICOM (800-872-4266) Monday – Friday 7 AM to 5 PM PST

#### ■ Information FCC

Cet équipement a été testé et reconnu conforme aux limites fixées pour un appareil numérique de classe A, conformément au point 15 de la réglementation FCC. Ces limites sont définies de façon à fournir une protection raisonnable contre le brouillage préjudiciable lorsque cet appareil est utilisé dans un environnement commercial. Cet équipement génère, utilise et peut émettre un rayonnement de fréquence radio. S'il n'a pas été installé conformément aux instructions, il peut par ailleurs créer des interférences perturbant les communications radio.

L'utilisation de cet appareil dans une zone résidentielle peut provoquer un brouillage préjudiciable, auquel cas l'utilisateur sera tenu de corriger la situation à ses frais.

MISE EN GARDE: Tout changement ou modification, non expressément approuvé par Icom Inc., peut annuler l'autorisation de l'utilisateur à utiliser cet appareil conformément à la réglementation FCC.

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1 OPERATING RULES

#### 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.

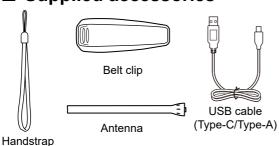
The Restricted Radiotelephone Operator Permit must be posted or kept with the operator. Only a licensed radio operator may operate a transceiver.

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.

**NOTE:** Even though the IC-M25/IC-M25EURO is capable of operation on VHF marine channels 1021, 1023, 1081, 1082, and 1083, according to FCC regulations these simplex channels cannot be lawfully used by the general population in the USA waters.

## ■ Supplied accessories



**NOTE:** Some accessories may not be supplied, or the shape may be different, depending on the transceiver version.

ACCESSORIES

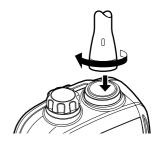
## ■ Attaching accessories

#### ♦ Antenna

Connect the supplied antenna to the antenna connector.

#### CAUTION:

- DO NOT carry the transceiver by holding only the antenna
- DO NOT connect an antenna other than those listed in this instruction manual.
- DO NOT transmit without an antenna.



#### ♦ Belt clip

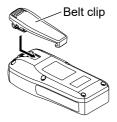
#### To attach:

Slide the belt clip in the direction of the arrow until the belt clip is locked and makes a 'click' sound.

#### To detach:

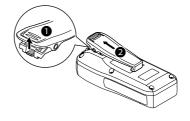
Lift the tab up (1), and slide the belt clip in the direction of the arrow (2).

**BE CAREFUL! DO NOT** break your fingernail.



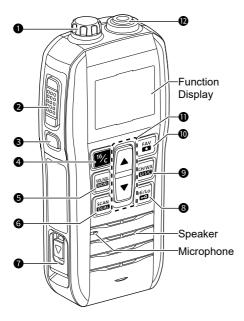
#### **♦** Handstrap

Pass the handstrap through the loop on the back side of the transceiver to make it easy to carry.





## **■** Front, top and side panels



#### SPEAKER/MIC JACK [SP/MIC] (p. 22)

Connects the optional external speaker microphone.

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

#### **2** PTT SWITCH [PTT]

Hold down to transmit, release to receive.

#### **③** POWER KEY [()]

Hold down for 1 second to turn the transceiver ON or OFF.

## **4** CHANNEL 16/CALL CHANNEL KEY [16/C] (p. 8)

- · Push to select Channel 16.
- Hold down for 1 second to select the Call channel.

#### VOLUME/SQUELCH/MONITOR KEY [VOL/SQL]/[MONI]

- Push once to display the volume level setting screen. (p. 11)
- Push twice to display the squelch level setting screen. (p. 11)
- Hold down for 1 second to turn ON the monitor function. (p. 12)

#### 6 SCAN/DUAL KEY [SCAN]/[DUAL]

- Push to start or stop a scan. (p. 14)
- Hold down for 1 second to start the Dual/Tri-watch mode. (p. 15)
  - While in Dualwatch, push to cancel Dualwatch.
  - Tri-watch may start, depending on the Set mode settings.
- Hold down both [SCAN] and [Hi/Lo] for 1 second to turn ON the AquaQuake function. (p. 12)

#### **1** USB PORT (Type-C) [USB]

Connects to an external power source, a PC, or other USB device.

- For only charging the battery.
- ① USB Power Delivery (USB PD) is not supported.

## ③ TRANSMIT POWER/LOCK KEY [Hi/Lo]/[--○]

- Push to set the power level to High or Low.
  - Some channels are set to only Low power
- Hold down for 1 second to lock or unlock the keypad. (p. 11)

#### CHANNEL/WEATHER CHANNEL KEY [CH/WX]/[U/I/C] or [CH]

- Push to switch between a regular channel and weather channel.\*1 (p. 9)
- Push to select a regular channel.\*2
- Hold down for 1 second to change the channel group. (p. 8)

**NOTE:** [CH] is described as [CH/WX] or [U/I/C] in this instruction manual.

- \*1 For the USA, EXP, and AUS versions
- \*2 For the EUR, FRG, NLD, and UK versions

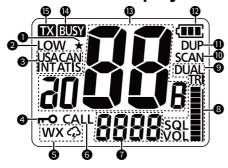
#### 

- · Push to select a Favorite channel.
- Hold down for 1 second to set or clear the selected channel as a Favorite channel.

#### **①** UP/DOWN KEYS [▲]/[▼]

- Push to select the operating channel.
- Push to change the volume/squelch level while adjusting.
- In the Set mode, push to select an item option.
- **② ANTENNA CONNECTOR** (p. 2) Connect the supplied antenna here.

## ■ Function Display



#### **1** FAVORITE CHANNEL ICON

Displayed when a Favorite channel is selected. (p. 14)

#### **2** LOW POWER INDICATOR

- Displayed when low power is selected.
- Blinks when a high temperature error or low voltage is detected, and automatically switches to low power.

#### **3** CHANNEL GROUP INDICATOR

(p. 8)

Displays the selected channel group, INT (International), USA, CAN (Canada), or ATIS.

The selectable channels differ, depending on the transceiver version, or the presetting.

#### **4** LOCK ICON

Displayed when the Lock function is ON. (p. 11)

#### **9** WEATHER CHANNEL ICON\*1

Displayed when the Weather channel is selected. (p. 9)

"\$\tilde{\phi}\$" is displayed when the Weather Alert function is ON.

#### **6** CALL CHANNEL INDICATOR

Displayed when the Call channel is selected. (p. 8)

#### **10** SUB CHANNEL READOUT

- Displays the volume/squelch level while adjusting the level. (p. 11)
- Displays Channel 16 during a priority scan, Dualwatch or Tri-watch.
   (p. 15)
- Displays the Set mode item while in the Set mode. (p. 16)

## **3** VOLUME/SQUELCH LEVEL INDICATOR

- Number of bars shows the volume/ squelch level.
- "SQL" blinks when adjusting the squelch level. (p. 11)
- "VOL" blinks when adjusting the volume level.

## DUALWATCH/TRI-WATCH INDICATOR\*2 Plinks during Dualwatch or

Blinks during Dualwatch or Tri-watch operation. (p. 15)

## **® SCAN INDICATOR**\*1 Blinks while scanning, (p. 14)

Blinks while scanning. (p. 14)

DUPLEX INDICATOR

## Displayed when a Duplex channel is selected.

#### **10** BATTERY INDICATOR

Displays the battery status.

TE: Full

T: Mid

Charging required

: Battery exhausted

#### **®** CHANNEL NUMBER READOUT

Displays the selected operating channel number.

#### **19** BUSY ICON

Displayed while receiving, or the squelch is open.

#### **(b)** TRANSMIT INDICATOR

Displayed while transmitting.

<sup>\*1</sup> For the USA, EXP, and AUS versions

<sup>\*2</sup> Except the NLD version

## ■ 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 incinerate used battery packs. Internal battery gas may cause an explosion.

⚠ DANGER! NEVER strike or otherwise impact the battery pack. Do not use the battery pack if it has been severely impacted or dropped, or if the pack has been subjected to heavy pressure. Battery pack 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 leave the battery pack in places with temperatures above 60°C (140°F). High temperature buildup in the battery cells, such as could occur near fires or stoves, inside a sun-heated vehicle, or in direct sunlight for long periods of time may cause the battery cells to rupture or catch fire. Excessive temperatures may also degrade the battery pack's performance or shorten the battery cell's life.

⚠ **DANGER! NEVER** place battery packs near a fire. Fire or heat may cause them to rupture or explode. Dispose of used battery packs in accordance with local regulations.

⚠ **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** 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 go to a doctor.

⚠ WARNING! NEVER let fluid from inside the battery cells come in contact with your body. If it does, immediately wash with clean water.

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

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

**CAUTION: DO NOT** use the battery pack out of the specified temperature range for the transceiver:

IC-M25: -20°C ~ +60°C (-4°F ~ +140°F) IC-M25EURO:-15°C ~ +55°C (5°F ~ 131°F) IC-M25EURO (AUS):

$$-10^{\circ}$$
C ~ +55°C (14°F ~ 131°F)

and the battery itself (–20°C ~ +60°C (–4°F ~ +140°F)). Using the battery out of its specified temperature range will reduce its performance and battery cell's 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: DO NOT** leave the battery pack fully charged, completely discharged, or in an excessive temperature environment (above 50°C, 122°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:

- Within a month
- $-20^{\circ}$ C ~ +50°C ( $-4^{\circ}$ F ~ +122°F)
- · Within three months
  - $-20^{\circ}$ C ~ +40°C ( $-4^{\circ}$ F ~ +104°F)
- Within a vear
- $-20^{\circ}\text{C} \sim +20^{\circ}\text{C} (-4^{\circ}\text{F} \sim +68^{\circ}\text{F})$

**CAUTION: DO NOT** expose the battery pack to rain, snow, saltwater, or any other liquids. Do not charge or use a wet pack. If the pack gets wet, be sure to wipe it with a clean dry cloth before using.

**CAUTION: DO NOT** continue to 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 lcom dealer or distributor.

**BE SURE** to replace the battery pack with a new one approximately 5 years after manufacturing, even if it still holds a charge. The material inside the battery cells will become weak after a period of time, even with little use. The estimated number of times you can charge the pack is between 300 and 500. Even when the pack appears to be fully charged, the operating time of the transceiver may become short when:

- Approximately 5 years have passed since the pack was manufactured.
- The pack has been repeatedly charged. The battery cells may deteriorate and swell due to their characteristics if used in an environment and conditions such as: frequently charged, recharged immediately after full charge, used or saved in a hot place, or charged by methods other than the instructions. If the battery pack swells, it has reached the end of its life due to deterioration. Replace it with a brand new one.

Contact your Icom's local service shop or authorized Icom dealer about the battery replacement.

## **■** 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!** Occasionally observe the battery pack condition while charging. If any abnormal condition occurs, discontinue using the battery pack.

**CAUTION: DO NOT** connect the transceiver into the power adapter if it is wet or soiled. This could corrode the power adapter or damage the USB port. The power adapter is not waterproof.

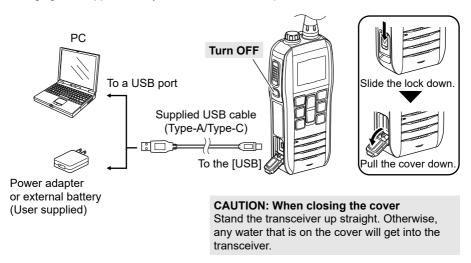
**NOTE: DO NOT** charge the battery pack outside of the specified temperature range: 15°C ~ 40°C (59°F ~ 104°F).

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.

## 4 BATTERY CHARGINGBEEP

## ■ Battery charging

Charging time: Approximately 3 hours with 5 V/2 A input



#### NOTE:

- The transceiver MUST be turned OFF while charging. Otherwise:
- The battery will not be charged correctly.
- The battery life may be shortened.
- "[ H[," is displayed and bars of the battery icon scroll while charging.

- ① When error is detected, the battery icon blinks and "Fr" and "FH" are displayed.
- "F!" is displayed when the battery has been fully charged.

#### NOTE for charging with a USB cable:

- USB Power Delivery (USB PD) is not supported.
- The charging time may differ, depending on the current. When you use a lower than 2 A output AC adapter or PC, it may take longer to charge, or the battery may not be charged.
- · Before using the AC adapter, thoroughly read its instructions.

**BASIC OPERATIONS** 

## ■ Selecting a channel

#### ♦ Regular Channel

You can select a channel by pushing [▲] or [▼].

#### ♦ Channel 16

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

- Push [16/C] to select Channel 16.
  - ① To return to the previously selected channel, push [CH/WX].



#### ♦ Call channel

Each Channel Group has separate leisure-use Call channels. The Call channel is scanned during Tri-watch. The Call channels can be selected and used to store your most often used channels in each Channel Group, for quick recall. See page 12 for details on setting the Call channel.

- Hold down [16/C] for 1 second to select the Call channel.
  - The Call channel number and "CALL" are displayed.
  - ① To return to the previously selected channel, push [CH/WX].



## ♦ Selecting a Channel Group

Channel Groups are preset into your transceiver. You can select a Channel Group for USA, International, Canadian, and ATIS, depending on the transceiver version.

- Hold down [U/I/C] (CH/WX) for 1 second to change the channel group.
  - The selectable channel groups may differ, depending on the transceiver version.

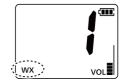
Version	Preset Channel Group				
Version	USA	INT	CAN	ATIS	
USA	✓	✓	✓		
UK	✓	✓			
EUR		✓			
FRG		✓		✓	
NLD		✓		✓	
AUS	✓	✓			
EXP	./	./	1		
(Other)	·	,	•		

NOTE: You cannot transmit on Channel 70.

## ■ Weather channels and Weather Alert (For the USA, EXP, and AUS versions)

The transceiver has 10 preset Weather channels. The transceivers are capable\* of monitoring broadcasts from the National Oceanographic and Atmospheric Administration (NOAA). The transceiver automatically detects a Weather Alert tone on the selected weather channel, or while scanning.

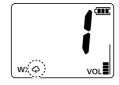
- \* When used within range of the broadcasts.
- 1. Push [CH/WX].
  - "WX" is displayed on the operating screen instead of the Channel Group.
- 2. Push [▲] or [▼] to select a Weather channel.



#### **♦ Setting the Weather Alert**

- 1. Turn OFF the transceiver.
- While holding down [VOL/SQL], turn ON the transceiver to enter the Set mode.
- 3. Push [VOL/SQL] to select the Weather Alert item.

   "#Lrt " is displayed.
- 4. Push [▲] or [▼] to turn ON the Weather Alert.
  - "♠" is displayed.
- 5. Push [16/C] to exit the Set mode.



#### The Weather channel list:

Channel	Frequency (MHz)	Channel	Frequency (MHz)
1	162.550	6	162.500
2	162.400	7	162.525
3	162.475	8	161.650
4	162.425	9	161.775
5	162.450	10	163.275

**NOTE:** When this function is turned ON, the currently selected weather channel is monitored, even while receiving another channel (when the Power Save function is turned ON), or during a scan.

## ■ Receiving and transmitting

**CAUTION: DO NOT** transmit without an antenna.

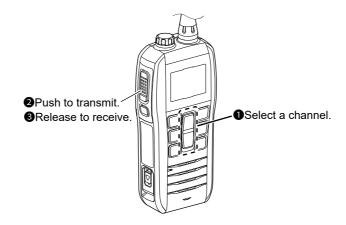
**NOTE:** Before using the transceiver for the first time, the battery pack must be fully charged for optimum life and operation. See Section 4 for battery charging.

- Push [▲] or [▼] to select a channel.
  - When a signal is received, "BUSY" is displayed.
- 2. Hold down [PTT], and speak into the microphone to transmit.
  - "TX" is displayed while transmitting.
- 3. Release [PTT] to receive.

**TIP:** To maximize the readability of your transmitted signal, pause for a second after pushing [PTT] and hold the microphone  $5 \sim 10$  cm ( $2 \sim 4$  inches) from your mouth, and then speak at your normal voice level.

#### NOTE:

- To conserve battery power, the Power Save function automatically turns ON when no signal is received for 5 seconds.
- When the temperature is extremely high, the battery protection function automatically sets transceiver power to Low, and disables High power selection.
- The Time-out Timer function\* cuts OFF transmission after 5 minutes of continuously transmitting, to prevent prolonged transmission. 10 seconds before transmission is cut off, a beep sounds to indicate the transmission will be cut off, and "TOT" blinks. After it is cut OFF, "tout" is displayed for 10 seconds, and you cannot transmit until it disappears.
- \* This function may not be installed, depending on the transceiver version.



## ■ Adjusting the volume level

You can adjust the volume level while the "VOL" icon is blinking.

- 1. Push [VOL/SQL] once to enter the Volume Adjustment mode.
- 2. Push [▲] or [▼] to adjust the volume level.
  - The level is displayed on the screen.
  - ① The volume can be adjusted between 0 and 30.
- Push [VOL/SQL] twice to exit the Volume Adjustment mode.

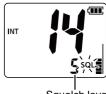


Volume level

## Adjusting the squelch level

Squelch enables the audio to be heard only while receiving a signal that is stronger than the set level. A higher level blocks weak signals, so that you can receive only stronger signals. A lower level enables you to hear weak signals.

- Push [VOL/SQL] twice to enter the Squelch Adjustment mode.
  - · The "SQL" icon starts blinking.
- Push [▲] or [▼] to adjust the squelch level, until the noise just disappears.
  - The level is displayed on the screen.
  - ① The squelch can bs adjusted between 1 and 10, and OP
- 3. Push [VOL/SQL] once to exit the Squelch Adjustment mode.

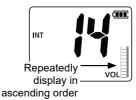


Squelch level

#### Volume Loud/Mute function

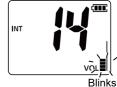
You can temporary maximize the volume level with a simple operation.

- While holding down [VOL/SQL], push [▲].
  - The volume level is set to the maximum level.
  - Push [VOL/SQL] and [▲] again to turn OFF the function.



You can temporary mute the audio output with a simple operation.

- While holding down [VOL/SQL], push [▼].
  - The volume level is set to the minimum level (OFF).
  - Push [VOL/SQL] and [▼] again to turn OFF the function.

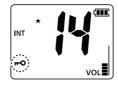


#### Lock function

The Lock function electronically locks all keys except for [--O], [PTT], [VOL/SQL], and [MONI].

This function enables you to prevent accidentally changing the channel, or accessing the functions.

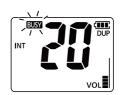
- Hold down [→O] for 1 second to turn the Lock function ON
  - "**FO**" is displayed while the function is ON.



#### **■** Monitor function

The monitor function opens the squelch.

- The monitor key action can be selected in the Set mode.
   (p. 17)
- The monitor function is activated by holding down [MONI] for 1 second.
  - "BUSY" blinks and the squelch is opened.



## ■ AquaQuake Water Draining function

Water in the speaker grill may muffle the sound coming from the speaker. The AquaQuake Water Draining function removes water from the speaker grill by vibrating the speaker cone.

- The AquaQuake Water Draining function is not usable when using the optional speaker microphone.
- 1. Hold down both [SCAN] and [Hi/Lo] for 1 second.
  - "ผู้จุ<sub>น</sub>ผู้" is displayed.
  - A low frequency vibration sounds is heard for 10 seconds to drain the water, regardless of the volume level setting.

**CAUTION:** The low frequency vibration sounds loudly.

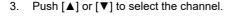
2. Push any key to turn OFF the function.

## ■ Setting the Call channel

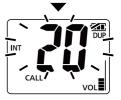
By default, a Call channel is set in each Channel Group. You can set your most often-used channel as your Call channel in each Channel Group, for quick recall.

- 1. Hold down [16/C] for 1 second to select the Call channel.
  - "CALL" and the Call channel number is displayed.
- Hold down [16/C] again for 3 seconds (until a long beep changes to 2 short beeps).
  - · The Call channel number blinks.





- Push [16/C] to set the selected channel as the Call channel.
  - · 2 short beeps sound.
  - · The Call channel number stops blinking.



## **SCAN OPERATION**

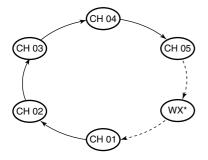
You can find ongoing communication by scanning the Favorite channels. Scan is for all transceiver versions except the NLD version.

#### Before starting a scan:

- Set the channels that you want to scan as Favorite channels. (p. 14) ① Only the Favorite channels are scanned.
- Set the scan type to "Priority Scan" or "Normal Scan" on the Set mode setting. (p. 14)

#### **Normal Scan:**

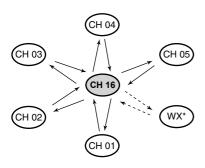
Sequentially searches through all Favorite channels. Channel 16 is not scanned unless it is set as a Favorite channel.



\* For the USA, EXP, and AUS versions. When the Weather Alert function is ON, the previously selected Weather channel is also scanned.

#### **Priority Scan:**

Sequentially searches through all Favorite channels, while also periodically checking Channel 16.



\* For the USA, EXP, and AUS versions. When the Weather Alert function is ON, the previously selected Weather channel is also scanned.

#### When a signal is received:

On Channel 16:

The scan pauses until the signal disappears. On a channel other than Channel 16: The scan switches to Dualwatch until the signal disappears.

#### **■** Favorite channels

You can quickly recall often-used channels by setting them as Favorite channels. You can set Favorite channels in each Channel Group.

#### **♦ Setting/Clearing**

- Push [▲] or [▼] to select the channel.
- Hold down [FAV\*] for 1 second to set or clear as a Favorite channel.
  - The selected channel is set as a Favorite channel, and "★" is displayed.

#### **♦** Selecting

- Push [FAV★].
  - Non-Favorite channels are skipped and not displayed.

TIP: You can clear all Favorite channels.

- ① If there is no Favorite channel, all channels will be set as Favorite channels.
- 1. Turn OFF the transceiver.
- While holding down [FAV★], turn ON the transceiver.

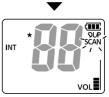
## Starting a scan (Except the NLD version)

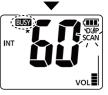
Example: Starting a Normal Scan.

- Push [SCAN] to start the scan.
  - "SCAN" blinks during a Normal Scan.
  - "15" is also displayed during a Priority Scan.
  - "BUSY" is displayed when a signal is received.
  - When a signal is received, the scan pauses until it disappears, or resumes after 5 seconds, depending on the Set mode setting. (p. 17)
  - 2 beeps sound and "16" blinks when a signal is received on Channel 16 during a Priority scan.
- 2. Push [SCAN] to stop the scan.

**TIP:** In order to properly receive signals, be sure to adjust the squelch to a suitable level.







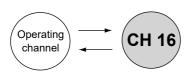
7

# DUALWATCH AND TRI-WATCH (Except the NLD version)

## **■** Description

Dualwatch and Tri-watch are convenient to periodically check Channel 16 while you are operating on another channel.

#### **Dualwatch:**



Periodically checks Channel 16 while operating on another channel.

# Operating channel Call channel CH 16

Periodically checks Channel 16 and the Call channel while operating on another channel.

#### When a signal is received:

On Channel 16: Dualwatch/Tri-watch pauses on Channel 16 until the signal

disappears.

On the Call channel: Tri-watch switches to Dualwatch until the signal on the Call channel

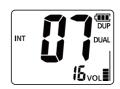
disappears.

## **■** Operation

- 1. Select Dualwatch or Tri-watch in the Set mode. (p. 17)
- 2. Push [▲] or [▼] to select a channel.
- Hold down [DUAL] for 1 second to start Dualwatch or Tri-watch.
  - · During Dualwatch, "DUAL" blinks.
  - · During Tri-watch, "TRI" blinks.
  - When a signal is received on the Channel 16, a beep tone sounds and "15" blinks.
  - When a signal is received on the Call channel, "CALL" is displayed.
- 4. Push [DUAL] again to cancel Dualwatch or Tri-watch.

#### Example:

Operating Dualwatch on Channel 07.







You can set seldom changed settings in the Set mode.

You can customize the transceiver settings to suit your preference and operating style.

- 1. Turn OFF the transceiver.
- While holding down [VOL/SQL], turn ON the transceiver to enter the Set mode.
   The "hffp" item is displayed.
- 3. Push [VOL/SQL], or push [▲] or [▼] while holding down [VOL/SQL] to select an item.
- 4. Push [▲] or [▼] to select an option.
- 5. Push [16/C] to exit the Set mode.

#### ♦ Set mode items

• Beep	• WX Alert*1	• Scan Type*2
<b>00</b> 6889	wx ALrt	Pr. o
• Scan Timer*2	• Auto Scan*²	Dual/Tri-watch*2
Scan	Ruto	dt DUAL
SQL Key Action	Backlight	Contrast
5915	<b>00</b> 8.61	<b>H.</b> Lede
Power Save	Float'n Flash	Float'n Flash Alarm
<b>Qn</b> P_SR	<b>O 1</b> FL R5	OF FLAL
Float'n Flash Power Save	Automatic AquaQuake	• CH Display*3
<b>QF</b> FLPS	OF A9UA	INT CH_ I
Charging Time Warning	• ECoP	
ũŋ	gF	
bt_[	E[op	

- \*1 For the USA, EXP, and AUS transceiver versions \*2 Except the NLD version
- \*3 The "CH Display" item is displayed for each selectable channel group.

## ■ Set mode items

**NOTE:** The Set mode items contained in the transceiver may be different, depending on the transceiver's version or presettings. Ask your dealer for details.

#### Веер "ЬЕЕР"

Turns the Key Beep function ON or OFF. OFF: Turns OFF the function for silent

operation.

ON: When a key is pushed, a beep sounds.

WX Alert "뭐 r 는" (For the USA, EXP, and AUS versions)

Turns the Weather Alert function ON or OFF.

① See page 9 for details.

OFF: The transceiver does not detect a Weather Alert tone.

ON: The transceiver detects the Weather Alert tone, and the "wx \$\phi\$" icon blinks and a beep sounds.

The blinking stops when another key is pushed.

## Scan Type "Pr. o" (Except the NLD version)

Turns the Priority Scan function ON or OFF.
OFF: The scan type is set to "Normal,"
which sequentially searches all
Favorite channels in the channel

ON: The scan type is set to "Priority," which sequentially searches all Favorite channels in the channel group, while also periodically checking Channel 16 (Priority channel).

## Scan Timer "5\_\{\xeta,\)" (Except the NLD version)

Turns the Scan Resume Timer ON or OFF. OFF: When a signal is detected on a channel, the scan pauses until the signal disappears, and then resumes.

ON: When a signal is detected on a channel, the scan pauses for 5 seconds, and then resumes. If the signal disappears in less than 5 seconds, the scan immediately resumes.

#### Auto Scan "Auto" (Except the NLD version)

Turns the Automatic Scan function ON or OFF

OFF: The function is OFF.

ON: Scan automatically starts when no signal is received, or no operations are carried out for 30 seconds.

## Dual/Tri-watch "de" (Except the NLD version)

Selects Dualwatch or Tri-watch.

d- (Dual): Periodically checks Channel
 16 while operating on another channel.

t- (Tri): Periodically checks Channel 16 and the Call channel while operating on another channel.

#### SQL Key Action "ኗዊኒ ኗ"

The function temporarily opens the squelch.
Pu (Push): The Monitor function is activated
by holding down [VOL/SQL]
for more than 1 second. The
squelch opens while holding
down the key.

Ho (Hold): The Monitor function is activated by holding down [VOL/SQL] for more than 1 second.
The squelch stays open until the user pushes any key.

#### Backlight "ጸ\_ ይ<u>ኒ</u>"

Turns the Automatic Backlight function ON or OFF

OFF: The function is OFF.

ON: The backlight turns ON for 5 seconds when the user pushes any key except [PTT].

#### Contrast "Lcdc"

Selects the transceiver's display contrast.

Hi: The transceiver's display contrast is set to High.

Lo: The transceiver's display contrast is set to Low.

BASIC MANUAL

#### Power Save "ፆ\_ ኗጸ"

Turns the Power Save function ON or OFF. OFF: The function is OFF.

ON: The Power Save function reduces current drain by deactivating the receiver circuit of the transceiver at specified intervals.

#### Float'n Flash "Fኒ ጸኗ"

Turns the Float'n Flash function ON or OFF. You can easily retrieve the transceiver from the water.

This function works even if the transceiver is turned OFF.

OFF: This function is OFF.

ON: The backlight, LED, or both of them send out intermittent light when the transceiver is floating on the water.

> ① This function is temporally OFF, and the transceiver can be operated when any key is pushed. This function is turned ON in 10 seconds after releasing the key.

#### Float'n Flash Alarm "투니워L"

Selects whether or not an alarm sounds while the light blinks when the transceiver is floating on the water.

This function is usable only when the Float'n Flash is turned ON.

OFF: The alarm does not sound.

ON: The alarm sounds while the light blinks when the transceiver is floating on the water.

**CAUTION:** The alarm sounds loudly.

#### Float'n Flash Power Save "Fኒ P5"

Turns the Float'n Flash Power Save function ON or OFF.

① This function is usable only when the Float'n Flash is turned ON.

OFF: This function is OFF.

ON: When the transceiver floats on the water, it enters the Float'n Flash Power Save mode to conserve battery power.

#### Automatic AquaQuake "អ៊ីប៊ីបូអ៊ី"

Set the Auto AquaQuake timer to 2, 5, or 10 seconds, or OFF. 10 seconds after the user takes the transceiver out of the water, the Float'n Flash function automatically stops and the AquaQuake function is activated for a set timer period.

OFF: The function is OFF.

2/5/10: The AquaQuake Water Draining function is automatically activated after stopping the floating alarm sound. A low vibration tone sounds for the specified time of 2, 5 or 10 seconds, to remove water from the speaker grill.

#### CH Display "[뭐\_ |"/" [뭐\_ []"/" [뭐\_ ["

Selects the number of digits to display the channel number. You can select settings for each channel group.

3d: The channel number is displayed in 3 digits, such as "78A."

4d: The channel number is displayed in 4 digits, such as "1078."

#### Charging Time Warning "bt\_["

Turns the Charging Time Warning function ON or OFF.

OFF: The function is OFF.

ON: A warning message is displayed for 5 seconds to indicate that the battery needs to be replaced after turning ON the transceiver if the total charging time exceeds the recommended replacement period.

#### ECoP "[[ 0P"

Turns the ECoP function ON or OFF.

OFF: The function is OFF.

ON: The high output power is changed from 5 W to 2.5 W to conserve battery power.

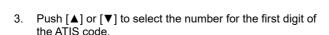
# ATIS CODE (For only the NLD and FRG versions)

The Automatic Transmitter Identification System (ATIS) ID consists of 10 digits. You can set and confirm the ID as shown below.

**NOTE:** You can enter this initial code ONLY ONCE. After entry, only your dealer or distributor can change it. If your ATIS code has already been entered, this entry is not necessary.

#### ♦ Setting the ATIS code

- 1. Turn OFF the transceiver.
- 2. While holding down [16/C], push [也].
  - Enters to the ATIS Code Setting mode.



ATIS

ATIS

- Push [CH/WX] to select the next digit, and then push [▲] or [▼] to select a number.
  - Pushing [VOL/SQL] selects the previous digit.
- After the 10th digit has been input, push [Hi/Lo] to store the code.
  - The code number stops blinking.
  - Push [16/C] to return to the normal operating mode.



#### **♦ ATIS** code confirmation

(Can be performed only when the ATIS code has been programmed.)

- 1. Turn OFF the transceiver.
- 2. While holding down [16/C], push [也] to enter the ATIS Confirmation mode.
  - The stored code number is displayed.
  - Push [CH] to select the next digit, push [VOL/SQL] to select the previous digit.





3. Push [16/C] to exit the ATIS Confirmation mode.

# SPECIFICATIONS AND OPTIONS 10

## **■** Specifications

- ① All stated specifications are subject to change without notice or obligation.
- ① Measurements made without an antenna.

General		IC-M25	IC-M25EURO	IC-M25EURO (AUS)
Frequency	TX	156.025 ~ 157.425 MHz	156.000 ~ 161.450 MHz	156.025 ~ 157.425 MHz
coverage	RX	156.050 ~ 163.275 MHz	156.000 ~ 163.425 MHz	156.300 ~ 162.000 MHz
Type of emission			16K0G3E (FM)	
Antenna impedance	)		50 Ω nominal	
Input impedance (M	IC)		2 kΩ	
Output impedance	External		4 Ω	
(audio)	Internal	8 Ω		
Operating temperature range		–20°C ~ +60°C, –4°F ~ +140°F	–15°C ~ +55°C, 5°F ~ 131°F	-10°C ~ +55°C, 14°F ~ 131°F
Power supply voltage	je	Negative ground: 3.7 V DC nominal		
Current drain (at 3.7 V DC)	Maximum audio	External speaker: 0.23 A Internal speaker: 0.4 A		
(approximate)	TX high	5 W: 2.3 A 1 W: 0.9 A		
Dimensions (projections not included)		56.5 (W) × 134.0 (H) × 31.2 (D) mm 2.2 (W) × 5.3 (H) × 1.2 (D) in		
Weight (approximate)		224 g, 7.9 oz (including the supplied antenna and belt clip)		

Transmitter	IC-M25	IC-M25EURO	IC-M25EURO (AUS)
Rated output power	5 W, 1 W		
SAR 10g	-	1.08 W/kg	_
Modulation	Variable reactance frequency modulation		
Maximum frequency deviation	±5 kHz		
Frequency error	±10 ppm	±1.5 kHz	±10 ppm
Spurious emissions	-68 dBc (typical)	0.25 μW	0.25 μW (typical)
Adjacent channel power		70 dB	
Audio harmonic distortion (at 60% Deviation)	10%		
Residual modulation	40 dB		
Audio frequency response	+1 dB ~ -3 dB of 6 dB octave from 300 Hz ~ 3000 Hz		

## 10 SPECIFICATIONS AND OPTIONS

#### ■ Specifications

Receiver		IC-M25	IC-M25EURO	IC-M25EURO (AUS)
Sensitivity (typical)		0.25 μV at 12 dB SINAD	–6 dBμ at 20 dB SINAD	
Squelch sensitivity (typical) (at threshold)		0.25 μV	0.25 μV –6 dBμ	
Audio output power	External (with 4 Ω)	0.3 W (typical) 0.2 W		
(at 10% distortion)	Internal (with 8 Ω)	0.7 W (typical)		
Adjacent channel se	electivity	70 dB (typical)	70 dB	65 dB
Spurious response		70 dB (typical)	70 dB	65 dB
Intermodulation		70 dB (typical) 68 dB 65 dB		65 dB
Hum and noise		More than 40 dB		
Audio frequency response +1 dB ~ -3 dB of -6 dB oc			–6 dB octave from 3	300 Hz ~ 3000 Hz

## Options

① Some options may not be available in some countries. Please ask your dealer for details.

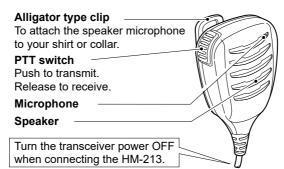
- BC-258A/E/V AC ADAPTER + OPC-2480 USB CABLE
- FA-SC59V ANTENNA
- MB-133 BELT CLIP
- HM-213 SPEAKER MICROPHONE

Full sized waterproof speaker microphone including alligator type clip to attach to your shirt or collar, and so on.

The HM-213 meets IP57 requirements for dust protection and waterproof protection.

## SPECIFICATIONS AND OPTIONS 10

## ■ Using the HM-213

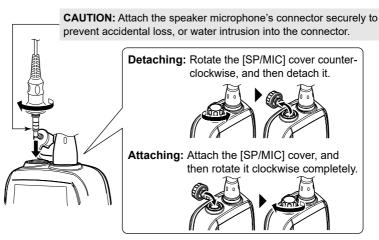


#### NOTE:

- NEVER immerse the connector in water. If the connector becomes wet, BE SURE to dry it before attaching to the transceiver.
- The microphone element is located at the top of the speaker microphone, as shown in the illustration above. To maximize the readability of your transmitted audio, hold the microphone approximately 5 ~ 10 cm (2 ~ 4 inches) from your mouth, and then speak at your normal voice level.

#### ♦ Attaching the HM-213

- 1. Turn OFF the transceiver.
- Insert the speaker microphone connector into the [SP/MIC] connector and securely screw it, as shown below.
  - ① Be careful not to cross-thread the connection.



**NOTE: KEEP** the transceiver's [SP/MIC] cover attached when the speaker microphone is not used. 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.

## 11 THE VHF MARINE CHANNEL LIST

## ■ For IC-M25 and IC-M25EURO (AUS)

**NOTE:** When the "Channel Display" is set to "3 digits" in the Radio setting, the channel number is displayed in 3 digits. See page 18 for details. (For example: "1001" is displayed as "01A.")

Channel Number			Freguen	Frequency (MHz)		
	USA INT CAN		Transmit	Receive		
	01	01	156.050	160.650		
1001	1001*3		156.050	156.050		
1001	02	02	156.100	160.700		
	03	03	156.150	160.750		
	03	03	156.200	160.730		
	04	1004	156.200	156.200		
	05	1004	156.250	160.850		
1005	1005*3	1005	156.250	156.250		
06	06	06	156.300	156.300		
4007	07	4007	156.350	160.950		
1007	1007*3	1007	156.350	156.350		
80	08	80	156.400	156.400		
09	09	09	156.450	156.450		
10	10	10	156.500	156.500		
11	11	11	156.550	156.550		
12	12	12	156.600	156.600		
13*1	13	13*1	156.650	156.650		
14	14	14	156.700	156.700		
15* <sup>2</sup>	15*4	15*1	156.750	156.750		
16	16	16	156.800	156.800		
17* <sup>1</sup>	17	17*1	156.850	156.850		
	18		156.900	161.500		
1018	1018*3	1018	156.900	156.900		
	19		156.950	161.550		
1019	1019	1019	156.950	156.950		
	2019		RX only	161.550		
20	20	20*1	157.000	161.600		
1020	1020		157.000	157.000		
	2020		RX only	161.600		
	21		157.050	161.650		
1021	1021*3	1021	157.050	157.050		
1021	1021	2021	RX only	161.650		
	22	2021	157.100	161.700		
1022	1022*3	1022	157.100	157.100		
1022	23	23	157.150	161.750		
1023	1023*3	20	157.150	157.150		
1023	1023	2023	RX only	161.750		
24	24*5					
		24	157.200	161.800		
25	25*5	25	157.250	161.850		
00	00*5	2025	RX only	161.850		
26	26*5	26	157.300	161.900		
27	27	27	157.350	161.950		
	1027*3		157.350	157.350		
28	28	28	157.400	162.000		
	1028*3		157.400	157.400		
		2028	RX only	162.000		
D S00	60	60	156.025	160.625		

Channel Number Frequency (MHz)							
USA INT CAN			Transmit	Receive			
	61	071.1	156.075	160.675			
	01	1061	156.075	156.075			
	62	1001	156.125	160.725			
	02	1062	156.125	156.125			
	63	1002	156.175	160.775			
1063	1063*3	1063		156.175			
1003			156.175				
	64	64	156.225	160.825			
	0.5	1064	156.225	156.225			
1005	65	4005+1	156.275	160.875			
1065	1065*3	1065*1	156.275	156.275			
	66		156.325	160.925			
1066	1066*3	1066*1	156.325	156.325			
67*1	67	67	156.375	156.375			
68	68	68	156.425	156.425			
69	69	69	156.475	156.475			
71	71	71	156.575	156.575			
72	72	72	156.625	156.625			
73	73	73	156.675	156.675			
74	74	74	156.725	156.725			
	75*4	75*1	156.775	156.775			
	76*4	76*1	156.825	156.825			
77*1	77	77*1	156.875	156.875			
	78		156.925	161.525			
1078	1078	1078	156.925	156.925			
	2078		RX only	161.525			
	79		156.975	161.575			
1079	1079	1079	156.975	156.975			
	2079		RX only	161.575			
	80		157.025	161.625			
1080	1080*3	1080	157.025	157.025			
	81		157.075	161.675			
1081	1081*3	1081	157.075	157.075			
1001	82	1001	157.125	161.725			
1082	1082*3	1082	157.125	157.125			
1002	83	1002	157.175	161.775			
1083	1083*3	1083	157.175	157.175			
.000	.000	2083	RX only	161.775			
84	84*5	84	157.225	161.825			
	_						
85	85*5	85	157.275	161.875			
86	86*5	86	157.325	161.925			
87	87	87	157.375	157.375			
88	88	88	157.425	157.425			

<sup>\*1</sup> Low power only.

**NOTE:** Simplex channels, 1021, 1023, 1081, 1082, and 1083 **CANNOT** be lawfully used by the general public in the USA waters.

<sup>\*2</sup> RX only.

<sup>\*3</sup> For only the USA and EXP versions.

<sup>\*4</sup> Low power only (Except for the AUS version).

<sup>\*5</sup> For only the AUS version.

① See page 9 for details on the WX channel.

## VHF MARINE CHANNEL LIST 11

## ■ For IC-M25EURO (Except AUS)

**NOTE:** When the "Channel Display" is set to "3 digits" in the Radio setting, the channel number is displayed in 3 digits. See page 18 for details. (For example: "1001" is displayed as "01A.")

#### ♦ International channels

СН	Frequency(MHz)		CH Frequency(MH		cy(MHz)	СН	Frequency(MHz)		СН	Frequency(MHz)	
СП	Transmit	Receive	Сп	Transmit Receive	Сп	Transmit	Receive	CH	Transmit	Receive	
01	156.050	160.650	16	156.800	156.800	1037*4	157.850	157.850	75*1	156.775	156.775
02	156.100	160.700	17*1	156.850	156.850	60	156.025	160.625	76*1	156.825	156.825
03	156.150	160.750	18	156.900	161.500	61	156.075	160.675	77	156.875	156.875
04	156.200	160.800	19	156.950	161.550	62	156.125	160.725	78	156.925	161.525
05	156.250	160.850	1019*2	156.950	156.950	63	156.175	160.775	1078*2	156.925	156.925
06	156.300	156.300	2019*2	RX Only	161.550	64	156.225	160.825	2078*2	RX Only	161.525
07	156.350	160.950	20	157.000	161.600	65	156.275	160.875	79	156.975	161.575
08	156.400	156.400	1020*2	157.000	157.000	66	156.325	160.925	1079*2	156.975	156.975
09	156.450	156.450	2020*2	RX Only	161.600	67	156.375	156.375	2079*2	RX Only	161.575
10	156.500	156.500	21	157.050	161.650	68	156.425	156.425	80	157.025	161.625
11	156.550	156.550	22	157.100	161.700	69	156.475	156.475	81	157.075	161.675
12	156.600	156.600	23	157.150	161.750	71	156.575	156.575	82	157.125	161.725
13	156.650	156.650	1027	157.350	157.350	72	156.625	156.625	83	157.175	161.775
14	156.700	156.700	1028	157.400	157.400	73	156.675	156.675	87	157.375	157.375
15* <sup>1</sup>	156.750	156.750	31*1,3	157.550	162.150	74	156.725	156.725	88	157.425	157.425
+4.									P4*5	161.425	161.425

<sup>\*1</sup> Low power only.

#### ♦ **USA channels** (for UK version only)

СН	Frequency (MHz)		СН	Frequency (MHz)		СН	Frequency (MHz)		СН	Frequency (MHz)	
СП	Transmit	Receive	СП	Transmit	Receive	Сп	Transmit	Receive	Сп	Transmit	Receive
1001	156.050	156.050	17*	156.850	156.850	1037	157.850	157.850	1079	156.975	156.975
1005	156.250	156.250	1018	156.900	156.900	1063	156.175	156.175	1080	157.025	157.025
06	156.300	156.300	1019	156.950	156.950	1065	156.275	156.275	1081	157.075	157.075
1007	156.350	156.350	20	157.000	161.600	1066	156.325	156.325	1082	157.125	157.125
08	156.400	156.400	1020	157.000	157.000	67*	156.375	156.375	1083	157.175	157.175
09	156.450	156.450	1021	157.050	157.050	68	156.425	156.425	84	157.225	161.825
10	156.500	156.500	1022	157.100	157.100	69	156.475	156.475	85	157.275	161.875
11	156.550	156.550	1023	157.150	157.150	71	156.575	156.575	86	157.325	161.925
12	156.600	156.600	24	157.200	161.800	72	156.625	156.625	87	157.375	157.375
13*	156.650	156.650	25	157.250	161.850	73	156.675	156.675	88	157.425	157.425
14	156.700	156.700	26	157.300	161.900	74	156.725	156.725	P4	161.425	161.425
15	RX only	156.750	27	157.350	161.950	77*	156.875	156.875		-	
16	156.800	156.800	28	157.400	162.000	1078	156.925	156.925			

<sup>\*</sup> Low power only

**NOTE:** Simplex channels, 1021, 1023, 1081, 1082, and 1083 **CANNOT** be lawfully used by the general public in the USA waters.

<sup>\*2</sup> Except for the NLD version.

<sup>\*3</sup> For only the NLD version.

<sup>\*4</sup> For only the NLD and UK versions (UK Marina Channel: M1=1037 (157.850 MHz) for the UK version), and low power only for the NLD version.

<sup>\*5</sup> UK Marina Channel: M2=P4 (161.425 MHz) for the UK version only.

① 1037 and P4 channels are UK Marina Channels: M1=1037, M2=P4.

# 12 TROUBLESHOOTING

#### The transceiver does not turn ON.

- The battery is exhausted.
  - → Recharge the battery pack. (p. 7)

#### Little or no sound comes from the speaker.

- Squelch level is set too high.
  - → Adjust the squelch level. (p. 11)
- Volume level is set too low.
  - → Adjust the volume level. (p. 11)
- The Volume Mute function is ON.
  - $\rightarrow$  Turn OFF the function.(p. 11)
- The speaker has been exposed to water.
  - → Use the AquaQuake Water Draining function to remove water from the speaker grill. (p. 12)

#### You cannot transmit, or cannot select high power.

- Some channels are set for low power or receive only by regulations.
  - → Change channels. (p. 8)
- The output power is set to low.
  - → Push [Hi/Lo] to select high power. (p. 3)
- The battery is exhausted.
  - → Recharge the battery pack.

#### Scan does not start.

- More than 2 favorite channels are not set.
  - → Set the Favorite channels. (p. 14)

#### No beep sounds.

- The Key Beep function is OFF.
  - → Turn ON the Key Beep function. (p. 17)

#### The keypad does not work.

- The keypad is locked.
  - → Hold down [ → o] for 1 second to lock or unlock the keypad. (p. 3)

#### The battery icon blinks, and "[-" and "[-" are displayed.

- The battery is charged outside the charging temperature range of 15°C (59°F) to 40°C (104°F).
- The battery temperature becomes hot such as after continuously transmitting for long time
  - → Keep the transceiver in a cool place until the internal battery cools down.

#### The battery cannot be fully charged.

- The transceiver is turned ON while charging.
  - → Turn OFF the transceiver, and then charge the battery again. (p. 7)
- The internal battery has becomes weak.
  - → Replace the internal battery. Ask your dealer for details. (p. 6)

Α	L	
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How the World Communicates	
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