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CUSTOMER CARE: 08000 960 970 WWW.COTELTELECOM.CO.UK

VHF MARINE TRANSCEIVER

6 Watt VHF with Float'n Flash and 12 Hours of Operation

- IP57 dust/water protection (1m of water for 30 minutes)
- Low Battery Alert function
- Voice Loud/Mute function temporarily maxes/mutes audio
- AquaQuake function prevents audio degradation from waterlogged speaker
- Dual-watch and Tri-watch functions
- Favourite Channel function
- Instant access to Channel 16 and the Call channel
- Large Keys and Easy-to-Grip Design
- 6 W RF Output Power
- 700 mW Audio Output
- More than 12 Hours* of Long-Lasting Operating Time (with BP-296)

  * TX: RX: Standby = 5 : 5 : 90.
- Channel History Function Stores the Last Five Channels Used for Easy Recall
- Float'n Flash Function

  The radio floats with a flashing LED light to help you retrieve it from the water.

Float'n Flash function (front/back)

Read this QR code to watch a movie!

Made in JAPAN

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Slim, Stylish, Powerful VHF with Professional Features

Bass Boost Function*

The signal processing technology emphasizes low-pitched sound to provide a rich bass sound for both transmit and receive signals.

Active Noise Cancelling Technology*

The built-in bidirectional active noise cancelling reduces background noise to up to 90% and improves both your transmitted voice and incoming call. You will hear better and clearer!

Last Call Voice Recording*

The last call voice recording function automatically saves the last incoming call for 1 minute. You can also start recording manually. You will not miss an important call.

700mW Loud Audio

The IC-M73EURO uses a BTL (bridge-tied load) amplifier that doubles the audio output. Its internal speaker delivers a loud 700mW audio output with clear sound.

6W RF Output Power

The IC-M73EURO's 6 Watts*1 of transmit power will provide extended communication range for the user. A large capacity Lithium-Ion battery allows for 18 hours of operation, under normal conditions*2.

*1 1W for FRG version, *2 Typical operation with 5:5:90 duty ratio.

6W RF Output Power

The IC-M73EURO continues to offer Icom's best waterproof protection. The radio has been tested to survive after being submersed in 1.5m (4.9ft) depth of water for 30 minutes.

Slim, Hourglass Body Wide Viewing Angle LCD

The IC-M73EURO has a stylish, ergonomic design. A durable and rugged body provides for user-friendly operation and long life. A wide viewing angle, high intensity LCD offers bright, easy to read characters.

IPX8 Advanced Waterproofing

- AquaQuake™ water draining function
- Dual/Tri-Watch function for monitoring Channel 16 and/or call channel
- 4 level battery indicator
- Favorite channel and tag scan functions
- Optional waterproof speaker-microphones, HM-167 and HM-202
- Rapid charger BC-210 supplied
- Auto power save function
- FA-S64V short antenna

* Basic version (no voice recorder, no noise canceller and no bass boost function) available for limited markets.

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VHF MARINE TRANSCEIVER

Marine and PMR Hybrid for Professional Use

Compact and Lightweight

The IC-M85E is the most compact (W×H×D: 56 × 92 × 36.2 mm) and lightweight (weight: 281 g (with BP-294, FA-SC58V and MBB-3)) commercial grade marine and land mobile hybrid radio in the world*.

* As of December 2021, researched by Icom.

700 mW Powerful Audio

Despite its compact body, the IC-M85E delivers 700 mW of loud audio. Clear communications is vital in noisy environments.

Private Conversation

The radio has a built-in Voice Scrambler and provides private communication between stations (32-code, compatible with UT-112 voice scrambler unit).

Automated Emergency Alarm

The IC-M85E has three emergency related functions: the MOB Alarm, Man Down and Lone Worker functions. If one of these functions are activated, the radio automatically makes an emergency alarm.

Instant Operation with Multi-Function Button

Channel group changing (Marine⇔PMR) or the scrambler function ON/OFF can be assigned in the multi-function button on the top panel*. The Key lock function can be activated by holding the button.

* Ask your dealer for details.

IP67 and MIL-STD Rugged Construction

The IC-M85E is built durable to endure 1 m submersion for 30 minutes and dust-tight protection. The radio also passes MIL-STD-810 specifications.

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VHF MARINE TRANSCEIVER

INTRINSICALLY SAFE VERSION

ATEX Intrinsically Safe Marine Radio

IPX7

Rugged MIL-STD 810

ATEX Intrinsically Safe Type Approval

The IC-M87 ATEX and designated options are certified to the ATEX Directive. It is suitable for use in hazardous areas where flammable gasses or liquids are used such as petroleum tankers and bulk cargo carrier.

The approved rating is **II 2G Ex ib IIA T3 Gb.**
Special conditions for use: Must be used with **BP-227AX**
When the transceiver is used in hazardous areas, either the jack cover or HM-138 must be attached to the connector. Ambient operating temperature: –20°C to +55°C

IPX7, Waterproof Construction

The IC-M87 ATEX is built tough to withstand hazardous and unhospitable environments at sea and on land. Even if the IC-M87 ATEX is dropped into water, the IPX7 waterproof construction will protect it from harm (1 m depth for 30 minutes). The compact and durable body also has been tested to US. military specifications (MIL-STD 810).

Li-ion Battery for Extra Long Battery Life

With the standard 1950 mAh (typ.) rechargeable Li-ion battery pack, BP-227AX, the IC-M87 ATEX allows you up to 19 hours of operating time.*
* Typical operation; Tx: Rx: Stand-by duty ratio = 5: 5: 90

22 Programmable Channels for PMR Use

The IC-M87 ATEX has 22 programmable channels for PMR use (146–174 MHz). Wide/narrow channel spacing is programmable for each channel, and CTCSS and DTCS signaling is built-in.
*Appropriate license will be required.

Built-in Voice Scrambler

The IC-M87 ATEX has a built-in 32 code voice scrambler. The voice scramble is compatible with the UT-112 which is adopted to some Icom marine radios.

Optional Waterproof Speaker-Microphone, HM-138

An optional waterproof speaker-microphone, HM-138, provides reliable operation, allowing you to wear the IC-M87 ATEX on your belt for added portable convenience.

Photo includes optional speaker-microphone, HM-138.

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VHF MARINE TRANSCEIVER

IECEx/ATEX INTRINSICALLY SAFE RADIO

iDAS™ NXDN™ IP67 Rugged MIL-STD 810

IEC Certifications

Mining : Ex ib I Mb
Gas : Ex ib IIC T4 Gb
Dust : Ex ib IIIC T110°C Db
−20°C≤Ta≤+55°C
IEC 60079-0 (2017), IEC 60079-11 (2011)

ATEX Certifications

Mining : I M2 Ex ib I Mb
Gas : II 2G Ex ib IIC T4 Gb
Dust : II 2D Ex ib IIIC T110°C Db
−20°C≤Ta≤+55°C
EN IEC 60079-0 (2018), EN 60079-11 (2012)

IP67 Dust-tight & Waterproof Protection

The IC-F3202DEX/F3203DEX series provides rugged protection against dust and water that is equivalent to IP67. The IC-F3202DEX/F3203DEX series can withstand 1m depth of water for 30 minutes and its dust-tight construction shuts out powder dust, sand and other objects.

IDAS™ Digital Mode Operation

The IC-F3202DEX/F3203DEX series provides can program NXDN™ Type-D single-site trunking and digital conventional as well as analog mode per channel. The following digital features are programmable.

- PTT ID (TX)
- Individual/Group calls
- Block decode
- Radio check (RX)
- Stun/kill/revive (RX)
- Call alert (RX)
- Remote monitor (RX)
- Emergency (TX)
- Digital voice scrambler (15-bit)
- Power ON/OFF status call (TX)
- RAN (Radio Access Number)
- Voting scan for multi-site conventional operation

TX: Transmit, RX: Receive

Analogue Mode Compatible

The IC-F3202DEX/F3203DEX series has built-in 5-Tone, 2-Tone, CTCSS and DTCS signaling capability for analogue mode group communication and selective calling. The lone worker and man down functions automatically send an emergency signal to assist in worker safety. The radio is perfect for use as an analogue transceiver ready for future digital migration.

Other Features

- 16 memory channels with channel announcement function
- MDC 1200 PTT ID and emergency transmission • DTMF autodial
- Three programmable buttons (including emergency red button)
- Low electrical resistivity body; Carrying case is not required
- 19.5–21 hours* operating time with BP-277EX (* 5: 5: 90 duty cycle with Power save.)
- Optional waterproof speaker-microphone, HM-203EX

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SMALL IS COOL!

Top Performance Ultra-compact VHF

Ultra-compact body (H156.5 x W66.5 x D110.1mm)
Easily fitted where space is a premium!

- **Ultra Compact Body, Flexible Installation**
The compact IC-M330GE measures only 156.5 (W) x 66.5 (H) x 110.1 (D) mm making it ideal for a cockpit where space is limited.

- **Intuitive User Interface**
A combination of the directional keypad and soft keys provides simple, smooth operation. Most used functions are assigned to soft keys for quick one push function access.

- **New Speaker Delivers Dynamic, Clear Audio**
A newly designed speaker delivers distortion-free clear audio even at full volume. It provides dynamic and clear audio over a wide bass and treble range.

- **Class-Leading Receiver Performance**
The IC-M330GE's receiver provides reliable communication in RF busy environment like a marina. (Selectivity and IMD: more than 70 dB).

- **Built-in Class D DSC**
The radio monitors CH 70 continuously, even while you are receiving another channel. DSC functions include distress, individual, group, all ships, urgency, safety, position request/report, polling request and DSC test calls.

- **Built In GPS Receiver and External GPS Antenna**
The GPS receiver provides your location, bearing and speed by using information from GPS, GLONASS and SBAS. The acquired position information can be used for DSC calls.
An external GPS antenna is supplied to maximise coverage.
*IC-M330GE is the first ICOM fixed marine VHF radio to comply with the latest maritime ITU standard 'ITU-R M493-14'. This standard, in essence, requires an external GPS antenna, ITU-R M493-14 will be compulsory from November 2018. All maritime Class-D fixed radios from all manufacturers will need to comply after this date.

- **And more...**
- IPX7 waterproof (1 metre depth of water for 30 minutes).
- AquaQuake™prevents audio degradation from a water-logged speaker.
- Common NMEA interface for external GPS/NAV connection.
- MA-500TR Class B AIS transponder compatible.
- Tag scan and favourite channel functions.
- Dual/tri-watch function for monitoring CH16 and/or call channel.
- Priority scan function.
- Display and keypad backlighting.
- External speaker connection.
- 3-digit or 4-digit channel display selectable.

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VHF MARINE TRANSCEIVER

Active Noise Cancelling Technology and Built-in GPS for Simple Installation

Optional COMMANDMIC™, HM-195GB

* Also available in super-white version

- **Built-in GPS Receiver (GPS antenna supplied)**
- **Active Noise Cancelling for Maximum Clarity**
- **Icom Marine Family User Interface & White Backlit LCD & Keypad**
- **10 W Loud Audio, Public Address and Foghorn**
- **Optional COMMANDMIC™ HM-195GB/GW for 2nd Station/Intercom**
- **Built-in Class D DSC**
- **IPX7 Waterproof Protection (1 m depth for 30 minutes)**
- **Common NMEA Interface for GPS/NAV Connection**
- **MarineCommander™, and MA-510TR Compatible**
- **AquaQuake™ Function**

- Remote control speaker-microphone, HM-205B/SW
- IPX7 waterproof protection
- Dual/tri-watch function
- Priority and normal scan
- Black and super white versions available.
- Supports 4-digit channels

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VHF MARINE TRANSCEIVER

Black Box Transceiver When Space is at a Premium

Installation example

Space Saving, Fully Functional VHF/DSC

Controlled by COMMANDMIC™ HM-195B/SW

HM-195B/SW may be sold separately, depending on version.

New Icom Marine Family User Interface

Shares same user interface operation with IC-M423.

Active Noise Cancelling Technology

Reduces background noise to up to 90%.

10 W Loud Audio, Public Address & Fog Horn

With external speaker.

Built-in Class D DSC

Meets ITU-R M493-14 specifications.

Built-in GPS Receiver

GPS antenna supplied

Common NMEA Interface

For GPS/NAV Connection.

MA-510TR/MA-500TR AIS Transponder Compatible

- MarineCommander™ compatible
- AquaQuake™ water draining function (HM-195B/SW)
- IPX7 waterproof protection both for IC-M400BBE and HM-195B/SW (1 m depth for 30 minutes)
- Dual/tri-watch function for monitoring Ch.16 and/or call channel
- Priority and normal scan
- Supports 4-digit channels

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VHF MARINE TRANSCEIVER

GMDSS Portable for Survival Craft

- ***Meets the strict environmental requirements for survival craft radio***

  The IC-GM1600E meets temperature, thermal shock, vibration and drop resistant (from 1 m height) requirements. After passing those environmental tests, the IC-GM1600E retains 1m depth waterproof construction as specified by IMO resolutions A.809(19), A.694(17) and related specifications.

- ***Optional high capacity Lithium battery, BP-234, has superior low temperature characteristics***

  Provides more than 8 hours operating time even at –20°C. (Duty cycle: Tx: Rx: Stand-by = 6: 6: 48)

- ***Large keypad with positive button action***

- ***Wide viewing angle LCD display***

- ***Meets MED 96/98/EC, "Wheel mark" requirements***

  MED

- ***Other features***

  • One touch access to Channel 16 and call channel
  • Highly visible yellow colored body
  • Bright LED indicator on the top of panel

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VHF MARINE TRANSCEIVER WITH DSC & AIS RECEIVER

AIS Traffic Info, Now in Your Hand

- AIS Receiver and Class-H DSC in One Package

AIS screen

DSC ACK screen

- 6 W RF Output Power
- Float'n Flash and MOB Auto Set Functions
- Class-Leading 1500 mW Audio
- Simplified Navigation Function
- 10 Hours (approx.) of Operating Time

And More

- Integrated GPS receiver
- Active noise cancelling technology
- IPX7 waterproof (1 m depth of water for 30 minutes)
- Dualwatch and Tri-watch functions
- Favourite channel function
- Supports 4-digit channels
- AquaQuake™ prevents audio degradation from a water-logged speaker

Day mode

GMDSS VHF TRANSCEIVER with CLASS A DSC

GM600

Night mode

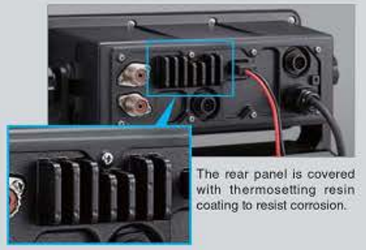
Class A DSC VHF Radio with Wide Viewing Angle Colour TFT LCD

GMDSS VHF Radio with Class A DSC

The GM600 is a GMDSS (Global Maritime Distress and Safety System) VHF radiotelephone which can be used as a part of GMDSS system equipment required by SOLAS or many domestic maritime regulations. When installed with the GM800 MF/HF radio, GM600 and GM800 radios provides an ideal GMDSS VHF, MF and HF radio station.

Meets MED "Wheel Mark" Requirements

The GM600 meets the Marine Equipment Directive 2014/90/EU on European marine equipment requirements and has passed rigorous environmental testing and quality assurance process. The GM600 is designed to provide reliable operation and long-lasting durability under harsh maritime environments. In fact, the front panel has IPX7 protection (1 m depth of water for 30 minutes) and the rear panel has corrosion resistance coating.



The rear panel is covered with thermosetting resin coating to resist corrosion.

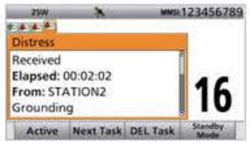
Meets ITU-R M.493-13 DSC

The built-in DSC provides automated distress and safety communication. The dedicated DSC watch-keeping receiver continuously monitors the DSC calling channel (CH70). A total of 100 MMSI numbers for DSC call (Individual ID: 75, Group: 25) can be stored with a 10-character ID name. Using the DSC Task mode provides straight-forward DSC operation.

DSC Task Mode Operation Example

When receiving a DSC call, a pop-up window appears. Push [Accept] button to send the acknowledgement to the calling station.

After sending or receiving a DSC call, the radio enters the DSC Task mode. Push [Next Task] button to select an other task. Up to 7 tasks can be stored.



4.3 inch Wide Viewing Angle Colour TFT LCD

The 4.3 inch colour TFT LCD provides almost 180 degree very wide viewing angle and displays high resolution characters and function icons. Even when the radio is installed to the instrument panel, the operator can clearly recognize the display information from various viewing angle. The night mode display ensures good readability in a dark place.

Menu screen

Backlight settings screen

Provides Loud, Clear Audio

The GM600's internal speaker enhances intelligibility of received calls. By adopting a new waterproof paper speaker cone, the speaker provides superior sound quality with a wide frequency range and a flat frequency response. In addition, the radio delivers powerful 10 W audio when connected to an external speaker.

Intuitive User Interface

A combination of the directional keypad and soft keys provides simple operation. The main 12 functions are assigned to soft keys (at the bottom of the display) and toggled with the left and right keys. The clearly labelled keypad provides straightforward entry. The CH16 button offers one-touch access to the CH16.

DC-DC Converter PS-310

The optional DC-DC converter PS-310 supplies a stable 12.6 V of power to the GM600 from either a 12 V or 24 V power source (depending on version) and provides a floating ground connection. The PS-310 protects the radio from momentary power interruption. The PS-310 must be used with the GM600 for MED certification compliance.

PS-310 DC-DC converter

And more

- IEC 61162-1 interface for GNSS receiver
- Supports new four-digit marine channels* effective from January 1st, 2017

* Following additional channels can be used: 1078, 2078, 1019, 2019, 1079, 2079, 1020 and 2020.

Class-D DSC VHF Marine Radio with WLAN Function

Radio Control & Intercom via Your Smart Device

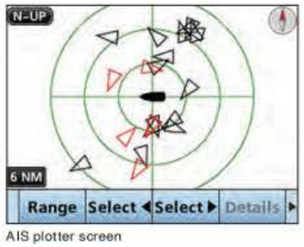
Use the RS-M500 app (for iOS™/Android™) to remotely control the IC-M510E through WLAN. Up to three smart devices can be used as a wireless microphone or remote controller in substitute for a simple microphone. Intercom function between your smart device and the radio is also available.

VHF MARINE TRANSCEIVER **IC-M510E**

Night Mode

Optional COMMANDMIC™
HM-195GB
HM-229B

Integrated AIS Receiver*

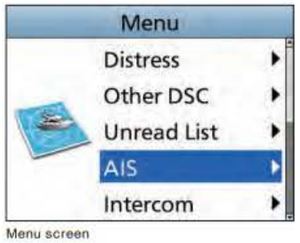


AIS plotter screen

With its integrated AIS receiver* or external NMEA sentence (third party AIS receiver, transponder), the IC-M510E can show real-time AIS vessel traffic information on the display. You can directly make an individual DSC call to selected AIS targets from the AIS screen.

* AIS receiver is not included depending on the transceiver version.

Wide Viewing Angle Colour TFT LCD



Menu screen

The colour TFT LCD provides nearly a 180-degree viewing angle. The wide display has high-resolution characters and function icons. The night mode screen ensures good readability in low light conditions.

New Sleek Design

Panel mount example

The IC-M510E is slim (depth: 53.6 mm) and easy to install in your boat. It's all-new sleek design is suitable for either panel or trunnion mounting.

Simplified Navigation Function

Navigation screen

The Navigation function guides you to a specified waypoint or AIS target. You can assign up to 100 destinations as waypoints.

Provides Clear, Loud Audio

The IC-M510E's internal speaker enhances the received audio. The waterproof speaker provides superior sound quality with a wide frequency range for powerful, clear audio.

Interface BOX for NMEA 2000™ and Hailer

CT-M500

The optional CT-M500 wireless interface box provides NMEA 2000™ connectivity and Two-way Hailer/PA function. The CT-M500 and the radio can be connected through WLAN. This separate interface box option allows for flexibility in positioning the unit closer to the NMEA network connection point.

And More

- Active Noise Canceling
- NMEA 0183/HS connectivity, NMEA 2000™ (CT-M500 required)
- Integrated GNSS receiver (Selectable from either internal receiver or use optional UX-241 GNSS antenna)
- IP68 advanced waterproofing (1 m depth of water for 60 minutes)
- Automatic Foghorn function (CT-M500 required)
- Voice Scrambler with optional UT-112A
- AquaQuake™ prevents audio degradation from a water-logged speaker
- Supplied speaker-microphone, HM-205RB can be connected to the rear panel
- External speaker connection
- Controlled with COMMANDMIC™ HM-195 or HM-229 series
- Supports 4-digit channels

CB2000

Class B - AIS Transponder

Transforms your ICOM VHF into a Class B AIS Transponder!

Introducing the advanced CB2000 AIS transponder unit which transforms the ICOM IC-M506EURO and IC-M605EURO to VHF/DSC radios complete with Class B AIS transponders. The CB2000 also provides a simple solution for those customers who already own an IC-M506EURO or IC-M605EURO but wish to upgrade their radios with the purchase of this Class B AIS transponder.

The CB2000 is a simple solution… it is simple to install and simple to program. Once installed the CB2000 works away in the background. The CB2000 aids collision avoidance by helping you track and contact anyone in your area fitted with an AIS transponder. Whether you are keeping in touch with other vessels in the area or tracking other boats on a similar course, you will be able to share information between vessels, leading to improved safety. The CB2000 gives you peace of mind by knowing that the vessels around can see you and you can see them!

This transponder radio solution will be ideal for all boaters, including sailing yachts, motor cruisers, RIBS and tenders, indeed anyone who wants the enhanced safety of an AIS transponder and the comfort and benefits it offers.

CB2000 Class B AIS Transponder

About the CB2000

The CB2000 is conveniently sized and connects to the NMEA2000 backbone that comes supplied with this package. The unit can be mounted discretely out of sight. It also has an NMEA2000 interface for simple connection to the majority of new AIS-compatible GPS chartplotters and includes an integral NMEA2000 drop cable with a male mini-connector. It consumes less than 2W power and is self-powered from the NMEA2000 network.

The CB2000 requires a dedicated VHF antenna or a suitable VHF/AIS antenna splitter and an NMEA2000GPS. There is a USB interface for programming and for PC/MAC-based navigation.

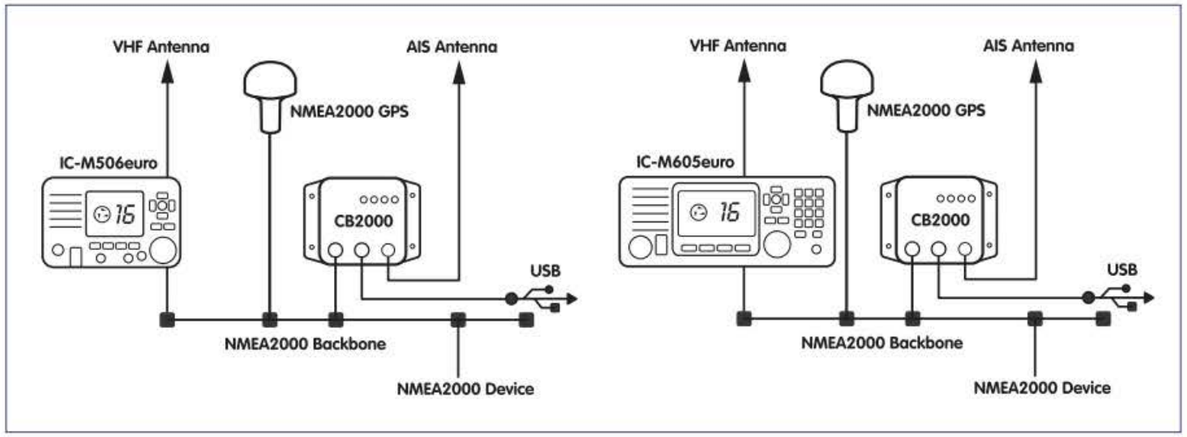
Available products

- IC-M506EURO with CB2000 Class B AIS transponder*
- IC-M605EURO with CB2000 Class B AIS transponder*
- CB2000 Class B AIS transponder*

*Includes N2K starter kit which features NMEA2000 backbone and cable for connection to the IC-M506/M605 or compatible device. Earlier versions of the IC-M506EURO may need a firmware upgrade. The CB2000 comes with a one-year warranty.

CB2000 Specifications

- Advanced AIS design for the best performance.
- Waterproof compact enclosure.
- NMEA2000 interface with integral 0.75m drop cable.
- USB interface.
- PC & MAC programming software included.
- Simple 'plug and play' installation.
- Supplied with programming and utility CD.
- Dimensions: 160mm x 120mm x 37.5mm (W x H x D)
- Weight 850g.



TRANSMITTER · AIS · USB · NMEA 2000 · GPS · WINDOWS 8 · LINUX · MAC · ANDROID

QAS International

Address: Cotel (UK) Rental, Pool Business Park, Dudnance Lane, Redruth, TR15 3QW
Free-call Customer Care: 08000 960 970
Website: www.coteltelecom.co.uk

fcs registered member

Benefits of AIS (Automatic Identification System)

An AIS transponder on your boat automatically receives information broadcast by other AIS-equipped vessel's and base stations, all while your own vessel's static and dynamic information is being transmitted. Using with an AIS transponder, you can find AIS mounted small boats and buoys that are difficult to be detected with a marine radar. The MA-510TR can receive both Class A and B AIS signals and increases your safety at sea.

Night mode screen

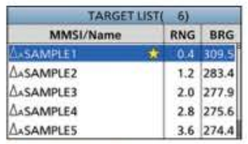
Risk Management and Simplified Navigation in One Package

4.3-inch Colour TFT LCD

Plotter screen (Day mode)

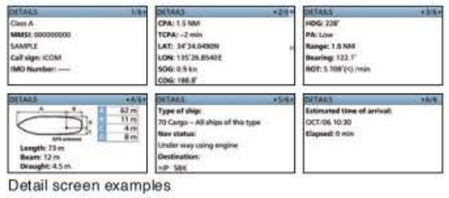
The wide viewing, high resolution 4.3-inch colour TFT display clearly shows your and other vessels' positions. Potentially dangerous vessels are shown in red and ships registered as your friends are shown in yellow. The day-mode display is readable in direct sunlight, and the night-mode display ensures good readability in the dark for further convenience.

AIS Target List and Details



TARGET LIST(6)		
MMSI/Name	RNG	BRG
SAMPLE1	0.4	309.5
SAMPLE2	1.2	283.4
SAMPLE3	2.0	277.9
SAMPLE4	2.8	275.6
SAMPLE5	3.6	274.4

Target list screen



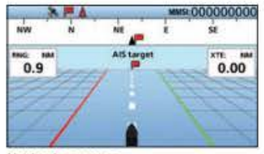
Detail screen examples

The 'Target' list screen shows all detected AIS equipped vessels and targets. The 'Danger' list screen shows a list of vessels that are within six nautical miles of Closest Point of Approach (CPA) and sixty minutes of Time to Closest Point of Approach (TCPA) from your vessel. The 'Friend' list screen displays the detected AIS targets that you set as friends. When you want to see target details, select the target by the cursor keys and push [ENT] key.

Simplified Navigation Function

The Navigation function guides you to a specified waypoint or AIS target. You can assign a maximum of 100 favourite fishing spots or destinations as waypoints. The Navigation function is simply started by just selecting a waypoint or an AIS target on the display.

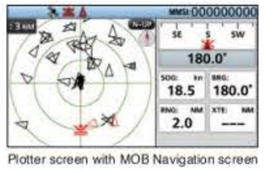
Plotter screen with Navigation screen



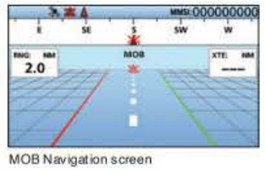
Navigation screen

Navigation to MOB Waypoint

When the [WPT/MOB] button is held down, the MA-510TR automatically marks a waypoint of the vessel's current position and activates the MOB (Man Overboard) navigation function to the location the MOB event occurred.



Plotter screen with MOB Navigation screen



MOB Navigation screen

Individual DSC Call

You can transmit an individual DSC Call by simply selecting an AIS target and the voice channel on the MA-510TR*.

* A compatible Icom VHF radio is required. The MA-510TR and a radio can be connected with the accessory cable. See the instruction manual of each for radio's connecting instructions.

USB Connectivity

AIS data can be output from an USB cable connector on the rear panel*.

* A third party application and a connection cable are required.

Supplied GPS Antenna

Supplied GPS antenna

The GPS receiver with SBAS function is integrated in the MA-510TR. Position information can be simply received with connection to the supplied GPS antenna with 10 m, 32.8 ft cable.

NMEA 2000™ & NMEA 0183 Connectivity

With the plug-and-play functionality of NMEA 2000™, the MA-510TR can connect to a NMEA 2000™ network (an external plotter, marine radar and VHF radio). Using NMEA 0183/-HS connectivity, the transponder can connect to a transceiver, plotter device, marine radar or GPS receiver.

Collision Alarm Function

When a vessel comes into the CPA or TCPA range, the vessel's icon blinks on the plotter display and a beep sound is heard. When connected to external audio equipment installed on the chart table or fly bridge, the collision alarm function will alert you, even when you are away from the AIS transponder.

Silent Mode for Security and Privacy

Silent mode switches off the AIS transmitter and allows you to temporarily stop transmitting your vessel's position information. This function is useful when you do not want to reveal your fishing spots to other vessels. You can receive other vessel's AIS reports also while the silent mode is ON.

Other Features

- Compatible with both 12 V and 24 V power sources
- Multi-lingual user interface (English, French, Indonesian, Spanish and Vietnamese)
- Anchor watch function sounds an alarm when your vessel is at anchor but has drifted
- IPX7 waterproof protection (up to 1 m depth of water for 30 minutes; except connectors)

Simplified ARPA, Wide Viewing Angle Color TFT LCD and Made in Japan Reliability

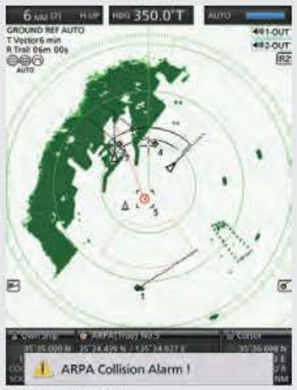
Collision Risk Management Functions

Simplified ARPA (Automatic Radar Plotting Aids) Function*

The simplified ARPA function helps to prevent a collision risk with other vessels or objects. Up to five targets can be automatically tracked on the radar echo, when a target enters within the set watch area, (or up to ten targets can be tracked when manually set). By selecting one of the targets, the target information such as position, course, speed, CPA, TCPA, bearing, and distance is shown on the lower side of the display. When the target enters within the CPA and TCPA limits, an alarm message is displayed with a beep alarm.

* External bearing, speed and position data required.

Simplified ARPA



Alarm example

DSC (Digital Selective Calling) Information Function*

When connected to a DSC radio and a DSC call is received, the received message is transferred to the MR-1010RII. Up to 20 DSC messages can be plotted on the radar echo. If a MOB position information is transmitted from a DSC handheld transceiver (including Icom IC-M94D), the MR-1010RII can show the MOB waypoint on the radar echo to assist in search and rescue operation.

* External bearing, position and DSC data required.

Received DSC example

AIS (Automatic Identification System) Overlay Function*

When connected to an external AIS device (including Icom IC-M605, M510 AIS and, M506 AIS), up to 100 AIS target icons are overlaid on the radar echo. By selecting an AIS icon, vessel information such as AIS class, MMSI number, vessel name, course, speed, CPA, TCPA, bearing and distance are shown on the lower side of the display.

* External bearing, position and AIS data required.

Compatible Icom marine DSC radio example, IC-M605

Other vessel AIS information

MARINE RADAR

MR-1010RII

Wide Viewing Angle Color TFT LCD

The wide viewing angle color TFT LCD offers bright, vivid echoes with 16 steps gradient intensity. The screen intensity and screen color (day, night and user settings) can be instantly adjusted with the "BRILL" button. In addition, the auto hide information function enlarges radar echoes to full size.

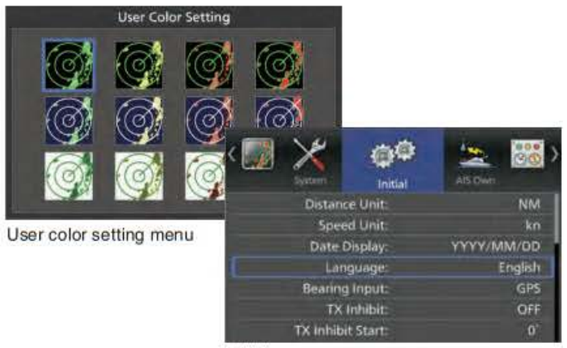
Night setting

Day setting

Multi-Lingual Intuitive User Interface

The language setting of the MR-1010RII is selectable from Multiple languages.* The large eight-direction cursor key provides smooth operation even when wearing gloves. Various settings can be configured through visually intuitive operation.

* EXP version : English, Indonesian, Korean, Portuguese, Spanish, Thai, and Vietnamese
EUR version : English, French, Italian, Portuguese, Spanish, and Turkish.



User color setting menu

Initial menu

Optional Video Output Unit

With an optional video output unit, UX-252, the MR-1010RII can be connected to an external display. Same radar echoes can be observed on the main unit and external display at the same time.

Video output example

TLL (Target Latitude Longitude) Function*

The MR-1010RII can mark points with icons and transfer the position data with NMEA TLL sentences to other NMEA 0183 devices such as an external plotter.

* External bearing and position data required.

True Trail Function*

The true trail function cancels own ship movement and shows true moving objects with trails, while static objects are not trailed.

* External bearing and position data required.

Other features

- 10.2–42 V wide DC input to prevent over voltage damage
- Two user programmable alarm zones
- Waypoint indication*
- Designed, engineered and Made in Japan

* External bearing, position and waypoint data required.