

## SPECIFICATIONS

GENERAL	
Frequency range	Tx 156.025–157.425 MHz Rx 156.050–163.275 MHz CH70 156.525 MHz AIS1, 2 161.975, 162.025 MHz
Usable channels	USA, CAN, INT, WX channels
Type of emission	16K0G3E (FM), 16K0G2B (DSC)
Power supply requirement	13.8 V DC (11.7–15.9 V DC)
Current drain (at 13.8 V DC)	Tx 25 W output 5.5 A Rx AF Max External SP 5.0 A (RX hailer ON) Internal SP 1.5 A
Operating temperature range	–20°C to +60°C; –4°F to +140°F
Antenna impedance	50 Ω (SO-239)
Weight (approx.)	1400 g; 3.09 lb
TRANSMITTER	
Output power (at 13.8 V DC)	25 W, 1 W
Max. frequency deviation	±5.0 kHz
Frequency tolerance	±10 ppm
Spurious emissions	Less than –70 dBc (at 25 W)
Residual modulation	More than 40 dB
Adjacent channel power	More than 70 dB
RECEIVER	
Intermediate frequency	1st 30.15 MHz, 2nd 450 kHz CH70
Sensitivity (at 12 dB SINAD)	0.22 μV typical
Adjacent channel selectivity	More than 75 dB CH70 (1% BER) More than 73 dBμ emf
Spurious response	More than 75 dB CH70 (1% BER) More than 73 dBμ emf
Intermodulation	More than 75 dB CH70 (1% BER) More than 68 dBμ emf
Hum and noise	More than 40 dB
Audio output power (at 10% distortion)	More than 15 W with a 4 Ω RX speaker

Measurements made in accordance with TIA/EIA 603 and IEC 62238. All stated specifications are subject to change without notice or obligation.

**Applicable U.S. Military Specifications**  
The IC-M506 and HM-205B/RM have been tested to and passed the following MIL-STD requirements and strict environmental standards.

Standard	Method	MIL 810 G	Procedure
Low Pressure	500.5	I, II	
High Temperature	501.5	I, II	
Low Temperature	502.5	I, II	
Temperature Shock	503.5	I-C	
Solar Radiation	505.5	I	
Rain	506.5	I	
Humidity	507.5	II	
Salt Fog	509.5	–	
Dust Blowing	510.5	I	
Immersion	512.5	I	
Vibration	514.6	I	
Shock	516.6	I, IV	

Also meets equivalent MIL-STD-810-C, -D, -E and -F.

### Applicable IP Rating

Ingress Protection Standard	Water
	IPX8 (1 m depth water for 60 minutes)

## OPTIONS

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

**COMMANDMIC™**

HM-195B (Black)    HM-195SW (Super white)

**Supplied accessories**

- 6.1 m (20 ft) of cable
- Microphone hanger
- Mounting base for connector

White backlit COMMANDMIC, HM-195GB/GW are also available.

**EXTENSION CABLE for COMMANDMIC, HM-195 series**

OPC-1541  
6.1 m (20 ft) extension cable. Up to two cables available.

**SPEAKER-MICROPHONE**

HM-205B/RB  
HM-205RB is for rear microphone version.

**HORN SPEAKER**

SP-37  
For Two-way hailer and foghorn.

**VOICE SCRAMBLER UNIT**

UT-112  
Provides up to 32 codes for private conversation.

**AIS RECEIVER UNIT, UX-231**

UX-231  
Already installed, depending on version.

**NMEA 2000 INTERFACE UNIT, UX-232**

UX-232  
Already installed, depending on version.

**CLASS B AIS TRANSPONDER**

MA-500TR  
For transmitting own vessel AIS information.

**FLUSH MOUNT KITS**

MB-75    MB-132

**DIMENSIONS**

Unit: mm (inch)

155 (6.1)    113.8 (4.5)    178.9 (7)    26.6 (1.1)    104.5 (4.1)    91.4 (3.6)

**Supplied accessories:**  
• Hand hanger • DC power cable • Mounting bracket kit

**REAR PANEL VIEW**

Showing IC-M506 AIS rear microphone version.

**CONFIGURATION VARIATIONS**

	Microphone	NMEA 2000	AIS Receiver
IC-M506 AIS	Front Mic Rear Mic	NMEA 2000/ NMEA 0183	Integrated AIS Receiver
IC-M506 PLUS	Front Mic Rear Mic	NMEA 2000/ NMEA 0183	Not included*2
IC-M506	Front Mic	NMEA 0183*1	Not included*2

\*1 Optional UX-232 is required for NMEA 2000.  
\*2 Optional UX-231 is required for AIS receiver.

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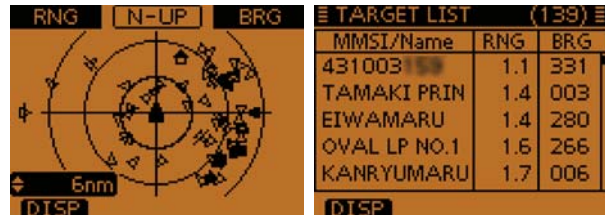
\* AIS receiver is an option, depending on version.

# Fixed Mount VHF and AIS Receiver Combo with NMEA 2000™ Connectivity



## Integrated AIS Receiver\*

With an integrated AIS receiver, the IC-M506 can show real-time AIS vessel traffic information on the display. The AIS target call function allows you to easily set up a DSC individual call. The Plotter, Target list and Danger list can be toggled on the display.



AIS plotter display

Target list example



## Active Noise Canceling

Using digital signal processing technology, the built-in bidirectional active noise cancelling provides superb performance. It reduces background noise to up to 90% in the received signal and 30% fixed in the transmitting signal. The function OFF setting is also possible.



## Intuitive Menu-Driven User Interface

The intuitive software key functions provide easy and fast operation to control the multiple functions of the IC-M506. The bottom line of the dot-matrix display shows the software key functions which can be toggled with the left and right buttons.



Functions menu



## 25 W Two-Way Hailer

When connected to the optional horn speaker, SP-37, you can talk with crews on the deck or shore from the radio's microphone and can hear any reply via the horn speaker. The RX hailer function allows you to monitor the received audio from the horn speaker. The built-in 25 W amplifier increases your talk power, making it loud and clear.



## Built-in Horn (Automatic & Manual)

When connected to the optional horn speaker, SP-37, four horn patterns are selectable for the automatic horn function.



## ITU Class D DSC

The built-in DSC watch function monitors Ch. 70 (DSC channel) activity, 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. Up to 100 DSC address IDs can be programmed.



## Rear Microphone Version\*

With this version, the microphone connector is drawn from the rear panel and a 6.1 m (20 ft) microphone extension cable is supplied to allow you clean and neat panel installation.



\* Ask your dealer for details.



## IPX8 Submersible Plus™

The IC-M506 and supplied HM-205B/RB microphone can withstand 1 m (3.2 ft) depth of water for 60 minutes.

## Other Features

- Auto and manual foghorn function
- Simple remote control speaker-microphone, HM-205B/RB
- 15W audio output power (with external speaker)
- Weather channels with alert function (USA version only)
- AquaQuake™ draining function
- Optional voice scrambler, UT-112 for private conversation
- MA-500TR AIS transponder and MarineCommander™ compatible

\* AIS receiver and NMEA 2000 interface units are options, depending on version.



## NMEA 2000™ Connectivity\*

With the plug-and-play functionality of NMEA 2000, the IC-M506 can easily connect to a NMEA 2000 network. The IC-M506 can receive and transmit GPS (position, course (COG) and speed (SOG)), AIS report and DSC call information data and transmit radio frequency and PGN list data on the network. Using this function, the IC-M506 can convert NMEA 0183 GPS data to NMEA 2000 data for other equipment.



## Last Call Voice Recording

The last call voice recording function automatically saves the last two minutes of the last incoming call. You can replay the received call, and not miss any incoming call.

## VHF MARINE TRANSCEIVER IC-M506



HM-195B

## Optional COMMANDMIC™ for 2nd Station Capability



### Full Control and Intercom

The optional COMMANDMIC, HM-195 series provides 2nd station capability for using the IC-M506 from up to 18.3 m (60 ft)\* away such as a separate cabin or tower. Most functions including DSC and AIS functions can be controlled from the COMMANDMIC and can be used as an intercom with the IC-M506.

\* Two optional OPC-1541 extension cables required.



### IPX7 Submersible Construction

The HM-195 series withstands submersion in up to 1 m (3.2 ft) depth of water for 30 minutes.



### Same Menu-Driven User Interface with IC-M506

The HM-195 series provides same user interface with the IC-M506. The directional keypad and softkey buttons allow you to perform various operations and settings. The audio and backlight levels can be set independently from the IC-M506.

### Other Features

- External speaker connection
- Black and super white color version
- Remote power ON/OFF function
- One COMMANDMIC can be used

"Distress" button on the back of the unit

