



MF/HF MARINE TRANSCEIVER

# IC-M710

GMDSS Version



## High quality specifications and construction that meet GMDSS class A specifications\*

### Compact design

The IC-M710 GMDSS system, which includes GM-110DSC, AT-130/E and PS-66, is compact compared to that offered by others—for easy and flexible installation.

### Essential channels/Distress call memories

The GM-110DSC monitors all 6 required MF/HF emergency frequencies in the A3/A4 geographical area with constant scanning. And 20 memories channels are used to store received distress calls.

### Selectable DSC format

DSC format can be set to one of 16 available formats, including *distress call*, *distress acknowledgement*, *distress relay call*, *distress relay acknowledgement*, *all ships call*, *geographical area call*, etc.

### Automatic acknowledgement

The automatic acknowledgement function is available for when the operator cannot transmit an acknowledgement, such as when the operator is way from the transceiver, etc.

### Time and position input (GPS unit required)

Manual and automatic time (UTC) and position (latitude and longitude) are displayed and the clock is automatically calibrated.



\*NOTE: The complete GMDSS installation for MF/HF DSC (Class A) and Telephony will additionally require the options GM-110DSC, AT-130/E and PS-66 shown in the above photo, depending on country.

### Rugged construction and ample output power

The highest quality components are used throughout, including a die-cast aluminum chassis with surface mount components. Designed for long hours of operation in the harsh marine environment, resistance to corrosion even allows installation in areas subject to salt fog. In addition, a full 125 W (PEP; measured at the AT-130/E) of output power is available for reliable long distance communications—output power is 150 W PEP in some countries or versions (where the AT-130/E is not required).

Ask your dealer for details.

Icom Inc.

## Other features

- Automatic and manual message printout capabilities
- Self test mode checks AFSK encoder/decoder activities without AFSK signal
- DSC self-indication capability
- Alphanumeric readout
- Covers all allowed bands between 1.6 and 27.5 MHz
- General coverage receiver
- 2-tone alarm built-in
- RF gain control
- Audio activated squelch
- Direct keypad channel selection entry
- Large, front-mounted speaker
- CW full break-in and semi break-in
- Scan functions

## SPECIFICATIONS

## GENERAL

- Frequency coverage\* (MHz) :  
Rx: 0.5000-29.9999  
Tx: 1.6-2.9999, 4.0-4.9999, 6.0-6.9999,  
8.0-8.9999, 12.0-13.9999, 16.0-19.9999,  
22.0-22.9999, 25.0-27.5000
- \*Restrictions may apply depending on version.
- Mode (varies with country) : J3E (USB), H3E, R3E,  
J2B (AFSK), F1B  
(FSK) and A1A (CW)
- Antenna connector : SO-239 (50 Ω)
- Power supply requirement : 13.6 V DC ±15% or  
(negative/floating ground) 19-32 V DC with PS-66
- Max. current drain (at 13.6 V DC):  
Transmit at max power 30 A  
Receive at max. AF output 3 A (2.5 A; USA version)
- Usable temperature range : -30°C to +60°C;  
-22°F to +140°F
- Frequency stability : ±10 Hz (-20°C to +60°C)
- Remote connector : D-Sub 9-pin (female)
- Dimensions (proj. not incl.) : 291.4×116.4×315 mm  
11<sup>5/8</sup>×4<sup>5/8</sup>×12<sup>1/2</sup> in
- Weight : 8.1 kg  
(17 lb 7 oz; USA version)

## TRANSMITTER

- Output power :  
4-25 MHz 125 W PEP\*  
Below 4 MHz/Above 25 MHz 85 W PEP\*
- \*The output power is provided by the AT-130/E antenna tuner.  
(150 W PEP below 25 MHz, 60 W PEP above 25 MHz for the  
USA version; provided by the antenna connector)
- Spurious emissions : -60 dB  
(-65 dB for USA version)
- Unwanted sideband : 55 dB
- Carrier suppression : 40 dB
- Microphone impedance : 600 Ω

## RECEIVER

- Sensitivity :  
J3E, R3E, J2B, A1A, F1B 6.3 μV (0.5-1.5999 MHz)  
(for 12 dB SINAD) 1 μV (1.6-1.7999 MHz)  
0.5 μV (1.8-29.9999 MHz)
- H3E 32 μV (0.5-1.5999 MHz)  
(for 10 dB S/N) 6.3 μV (1.6-1.7999 MHz)  
3.2 μV (1.8-29.9999 MHz)
- Spurious response rejection ratio:  
(1.6-29.9999 MHz) More than 70 dB
- Audio output power : 4.5 W typ. at 10% distortion  
(at 13.6 V DC) with a 4 Ω load
- Audio output impedance : 4-8 Ω
- Clarity variable range : ±150 Hz

## Supplied accessories:

- ACC plugs
- Mounting bracket kit
- Spare fuses
- DC power cables

All stated specifications are subject to change without notice or obligation.

## GM-110DSC DSC TERMINAL UNIT



## SPECIFICATIONS

- Frequencies (MHz) : 2.1875, 4.2075, 6.312,  
8.4145, 12.577, 16.8045
- Mode : J2B (AFSK)
- Power supply requirement : 13.6 V DC ±15%  
(negative/floating ground)
- Max. current drain : 3 A (start up)  
(at 13.6 V DC)
- Usable temperature range : -15°C to +60°C
- Antenna connector : SO-239 (50 Ω)
- Dimensions (proj. not incl.) : 150×49.5×180 mm
- Weight : 1.6 kg
- Receiver system : Single-conversion  
superheterodyne
- Intermediate freq. : 9.0106 MHz
- Receive sensitivity : 0.5 μV at 10 dB S/N
- Selectivity : More than 1 kHz/-40 dB
- Spurious and image rejection ratio:  
More than 70 dB
- Audio output power : More than 1.5 W at 10% distortion  
(at 13.6 V DC) with an 8 Ω load

## OTHER REQUIRED UNITS

## AT-130/E HF AUTOMATIC ANTENNA TUNER



## PS-66 DC-DC CONVERTER



## HS-50 HANDSET



## AT-130/E HF AUTOMATIC ANTENNA TUNER

Matches the transceiver to a long wire antenna with little insertion loss.

## PS-66 DC-DC CONVERTER

Provides 13.6 V DC (30 A) output from 10.5-16 V DC.

## PS-66 DC-DC CONVERTER

Provides 13.6 V DC (30 A) output from 19-32 V DC.

## EM-101 HAND MICROPHONE

Availability varies with country.

## HS-50 HANDSET

Provides clear audio reception and listening privacy.

Icom Inc. 6-9-16, Kamihigashi, Hirano-ku, Osaka 547-0002, Japan Phone: 06 793 5302 Fax: 06 793 0013

Count on us!

## Icom America Inc.

<Corporate Headquarters>  
2380 116th Avenue N.E., Bellevue, WA 98004, U.S.A.  
Phone: (425) 454-8155 Fax: (425) 454-1509  
URL: <http://www.icomamerica.com>

<Customer Service>  
Phone: (425) 454-7619

## Icom Canada

A Division of Icom America Inc.  
3071 #5 Road, Unit 9, Richmond, B.C., V6X 2T4, Canada  
Phone: (604) 273-7400 Fax: (604) 273-1900

## Icom (Australia) Pty. Ltd.

A.C.N. 006 092 575  
290-294 Albert Street, Brunswick, Victoria, 3056, Australia  
Phone: 03 9387 0666 Fax: 03 9387 0022

## Asia Icom Inc.

6F No. 66, Sec. 1 Cheng-Teh Road, Taipei, Taiwan R.O.C.  
Phone: (02) 2559 1899 Fax: (02) 2559 1874

## Icom (Europe) GmbH

Communication Equipment  
Himmelgaster Str. 100, D-40225 Düsseldorf, Germany  
Phone: 0211 346047 Fax: 0211 533639  
URL: <http://www.icomeurope.com>

## Icom Telecomunicaciones s.l.

"Edificio Can Castanyer" C/ta. Gracia a Matresna km. 14.750  
08190 Sant Cugat Del Valles Barcelona, SPAIN  
Phone: (93) 589 46 82 Fax: (93) 589 04 46  
E-mail: [icom@leida.com](mailto:icom@leida.com)

## Icom (UK) Ltd.

Unit 9, Sea St., Heme Bay, Kent, CT6 8LD, U.K.  
Phone: 01227 741741 Fax: 01227 741742  
URL: <http://www.icomuk.co.uk>

## Icom France S.a

Zac de la Plaine, Rue Brindejonc des Moulins  
BP 5804, 31505 Toulouse Cedex, France  
Phone: 561 36 03 03 Fax: 561 36 03 00  
URL: <http://www.icom-france.com>

Your local distributor/dealer: