



VHF MARINE TRANSCEIVER

# IC-M88

**Submersible**

1m depth for 30 minutes

**Intrinsically safe  
versions available**



**Rugged  
MIL-STD 810**



## Not Just Another Marine Radio!

### Tough construction, superior waterproofing

The IC-M88 is built tough to withstand hazardous and inhospitable environments at sea and on land. Even if the IC-M88 is dropped into water, complete waterproofing\* will protect it from harm. The compact and durable body has been tested to the military specifications (MIL-STD).

\* Equivalent to JIS waterproof grade 7. (1m depth for 30 minutes)

### Simple operation

6 clearly labelled buttons on the front panel and the volume/power knob maximize simplicity of operation. Even when wearing gloves, the large buttons are easy to operate. A large, clear LCD with backlighting and backlit buttons make night time operation simple.

### Li-Ion battery for extra long battery life

With the standard 1700mAh Li-Ion battery pack, the BP-227, you can get up to 15 hours of talk time\* without worrying about 'memory effect' on batteries. An optional AA alkaline battery case, BP-226, provides a convenient back up and great reassurance in an emergency.

\* Typical operation; Tx:Rx:Stand-by duty ratio = 5:5:90

### Waterproof speaker-microphone, HM-168

An optional waterproof speaker-microphone, the HM-168, provides reliable operation, even with the IC-M88 securely on your belt.

### 22 programmable channels for land use

The IC-M88 has 22 programmable channels reserved for Land use (146–174MHz). Wide/narrow channel spacing is programmable for each channel, and CTCSS and DTCS signaling is built-in.

\*Appropriate license will be required.

### Additional features

- Auto WX scan and WX Alert function (U.S.A. version only)
- Simple Up/Down switches for operating channel selection
- Instant access to Ch. 16 and Ch. 9 (or call channel)
- Simple add/delete TAG scanning operation
- Powerful 5W output
- 2 step power saver
- 4 level battery indicator
- The self check function checks internal temperature, connected battery voltage (over voltage detection), and water intrusion



**Icom Inc.**

## Intrinsically safe versions approved by Factory Mutual Research Corporation



There are versions that conform to intrinsically safe rating of the FMRC (Factory Mutual Research Corporation). It can be used in many hazardous marine environments such as petroleum tankers and bulk cargo carrier. Ask your dealer for details.

Intrinsically safe : Class I, II and III, Division 1, Groups C, D, E, F, G  
Nonincendive : Class I, Division 2, Groups A, B, C, D hazardous locations when used with Icom BP-227FM battery pack. "Max. Temp. T3C at 40°C"  
Approved accessories: Speaker-microphone, HM-138

## SPECIFICATIONS

## GENERAL

- Frequency range :
  - Marine Tx 156.025–157.425MHz
  - Rx 156.050–163.275MHz
  - LMR Tx/Rx 146.000–174.000MHz
- Usable channels\* (\*Varies according to version):
  - All U.S.A., International and Canadian channels;
  - 22 LMR channels plus 10 weather channels
- Channel spacing :
  - Marine 25kHz (16K0G3E)
  - LMR 25/12.5kHz
  - (16K0F3E/8K50F3E)
- Current drain (at 7.2V DC) :
  - Tx (at 5W output) 1.6A
  - Rx (at AF max.) 200mA
- Operating temp. range (except BP-227):
  - Marine –20°C to +60°C; –4°F to +140°F
  - LMR –30°C to +60°C; –22°F to +140°F
- Antenna impedance : 50Ω (SMA)
- Dimensions (W×H×D) : 62×97×39 mm;
- (proj. not included) 2<sup>7</sup>/<sub>16</sub>×3<sup>13</sup>/<sub>16</sub>×1<sup>17</sup>/<sub>32</sub> in
- Weight (approx.; with BP-227): 280g; 9.9oz

## TRANSMITTER

- Output power (Hi/Mid/Low) : 5/3/1W
- Max. frequency deviation :
  - Marine ± 5.0kHz
  - LMR (wide/narrow) ± 5.0/2.5kHz
- Audio harmonic distortion : Less than 10% (at 60% mod.)
- Spurious emissions : –70dBc typical
- Adjacent channel power :
  - Marine 70dB
  - LMR (wide/narrow) 70/60dB
- Hum and noise ratio :
  - Marine 40dB
  - LMR (wide/narrow) 40/34dB

## RECEIVER

- Sensitivity (at 12dB SINAD) : 0.25μV typical
- Squelch sensitivity : 0.35μV typical (at threshold)
- Adjacent Ch. selectivity :
  - Marine 70dB typical
  - LMR (wide/narrow) 70/60dB typical
- Spurious response : 70dB typical

- Intermodulation rejection : 70dB typical
- Hum and noise ratio :
  - Marine 40dB
  - LMR (wide/narrow) 40/34dB
- Audio output power : 0.35W typical (at 10% distortion with an 8Ω load)

## Applicable U.S. Military Specifications

Standard	MIL 810 F	
	Method	Procedure
Low Pressure	500.4	I, II
High Temperature	501.4	I, II
Low Temperature	502.4	I, II
Temperature Shock	503.4	I
Solar Radiation	505.4	I
Rain	506.4	I, II
Humidity	507.4	–
Salt Fog	509.4	–
Dust	510.4	I
Vibration	514.5	I
Shock	516.5	I, IV

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

## Supplied accessories: (\*Varies according to version.)

- Battery pack • Battery charger • AC adapter\*
- Swivel belt clip • Antenna, FA-S59V • Hand strap

Measurement made in accordance with TIA/EIA-603. All stated specifications are subject to change without notice or obligation.

## OPTIONS

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

## BP-226 BATTERY CASE

Battery case for AA (LR6)×5 alkaline cells. Water resistant, equivalent to JIS Grade 4.

## BP-227/BP-227FM BATTERY PACK

7.2V, 1850mAh (min.) 1950mAh (typ.) Li-Ion battery pack. Provides 15 hours operating time\* (approx. at 5 Watts). Same as supplied. Operating temp. range: –20°C to +60°C; –4°F to +140°F

\* Tx (Hi): Rx: standby=5:5:90

## BC-152 DESKTOP CHARGER

## + BC-147\*1 AC ADAPTER

Regularly charges the BP-227, BP-227FM in 9-10 hours. Same as supplied.

\*1 BC-145/BC-147SA for 120V AC. SE for 230V AC. SV for 240V AC.

## BC-119N DESKTOP CHARGER

## + AD-100 CHARGER ADAPTER

## + BC-145\*1 AC ADAPTER

For rapid charging of battery pack. An AC adapter is supplied depending on version. Charging time: 2.5–3 hours.

## BC-121N MULTI-CHARGER

## + AD-100 CHARGER ADAPTER

## + BC-157S AC ADAPTER

For rapid charging of up to 6 battery packs (Six AD-100s are required). Charging time: 2.5–3 hours.

## CP-23L CIGARETTE LIGHTER

## CABLE WITH NOISE FILTER

**OPC-515L DC POWER CABLE**  
For use with the battery charger, BC-119N, instead of the AC adapter. (12–16 V DC required)

## OPC-656 DC POWER CABLE

For use the BC-121N with a DC power supply. (12–16V DC required)

## HM-138 SPEAKER-MICROPHONE

Full sized speaker-microphone. Equivalent to IPX7.

## HM-168 SPEAKER-MICROPHONE

Compact type speaker-microphone. Equivalent to IPX7.

## MB-86 SWIVEL BELT CLIP

Swivel belt clip. The same as that supplied.

## MB-98 BELT CLIP Alligator type belt clip.

## MB-96N LEATHER BELT HANGER

Swivel type belt hanger.

## MB-96F LEATHER BELT HANGER

Fixed type belt hanger for use with MB-98.



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