

# IC-M87



## Not Just Another Marine Radio!

### Tough, water resistant construction

The IC-M87 is built tough to withstand hazardous and inhospitable environments at sea and on land. Even if the IC-M87 is dropped into water, complete water resistance will protect it from harm. The compact and durable body also meets military specifications (MIL-STD).

\* Equivalent to JIS Grade 7 or IPX7 of the corresponding International Standard IEC 529 (1989). (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, BP-227, you can get up to 15 hours of operating time\* without worrying about 'memory effect' of the battery. 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

### Water resistant speaker-microphone, HM-138

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

### Powerful 5 Watts output power

The 5 Watts of output power ensures the reliability of your communication, even over long distances with the standard battery pack. To save on battery consumption, you can reduce the output power to 3 Watts or 1Watt.

### 22 free channels for PMR use

The IC-M87 has 22 free channels reserved for PMR use (146-174MHz). Wide/narrow channel spacing is programmable for each channel, and CTCSS and DTCS signaling is built-in.

\*Appropriate license may be required.

### Desktop charger supplied

The BC-152 desktop charger is a simple drop-in charger. Set the charger on a table or mount it to a wall.



## ADDITIONAL FEATURES

- Simple Up/Down switches for operating channel selection
- Instant access to Ch. 16 and call channel
- Simple add/delete TAG scanning operation
- Monitor button opens squelch
- Automatic scan function
- 2 step power saver

- Key lock function
- Battery indicator shows remaining battery power in 4 levels
- Beep sound is programmable for each button
- The self check function checks internal temperature, connected battery voltage (over voltage detection), and water intrusion

## SPECIFICATIONS

### GENERAL

- Frequency range :
  - Marine Tx 156.000-161.450MHz
  - Rx 156.000-163.425MHz
  - PMR Tx/Rx 146.000-174.000MHz
- Usable channels\* :
  - All International and U.S.A. channels
  - 22 PMR channels (\*Varies according to version.)
- Channel spacing :
  - Marine 25kHz
  - PMR 25/12.5kHz, 20/12.5kHz
- PLL channel step (PMR) : 5/6.25/7.5kHz
- Current drain (at 7.2V DC) :
  - Tx (at 5W output) 1.6A
  - Rx (at AF max.) 200mA
- Operating temp. range (except BP-227) :
  - Marine -15°C to +55°C
  - PMR -25°C to +55°C
- Antenna impedance : 50Ω (SMA)
- Dimensions (W×H×D) : 62×97×39 mm (projections not included)
- Weight (approx.) : 280g (with BP-227)

### TRANSMITTER

- Output power (Hi/Mid/Low) : 5/3/1W
- FRG version Marine 1/0.5W
- PMR 5/3/1W
- Max. frequency deviation :
  - Marine ±5.0kHz
  - PMR (25/12.5kHz) ±5.0/2.5kHz
  - (20/12.5kHz) ±4.0/2.5kHz
- Audio harmonic distortion : Less than 10% (at 60% mod.)
- Spurious emissions : 0.25μW (below 2GHz)
- Adjacent channel power :
  - Marine 70dB
  - PMR (wide/narrow) 70/60dB
- Residual modulation :
  - Marine 40dB
  - PMR (wide/narrow) 40/34dB

#### Supplied accessories:

- Battery pack • Battery charger • AC adapter\*
- Swivel belt clip • Antenna, FA-S59V • Hand strap
- (\*Varies according to version.)

### RECEIVER

- Sensitivity (at 20dB SINAD; emf) :
  - Marine -2dBμ typical
  - PMR -4dBμ typical
- Squelch sensitivity (emf) : ±0dBμ typical (at threshold)
- Adjacent Ch. selectivity :
  - Marine 70dB
  - PMR (wide/narrow) 70/60dB
- Spurious response : 70dB
- Intermodulation rejection :
  - Marine 68dB
  - PMR 65dB
- Hum and noise ratio :
  - Marine 40dB
  - PMR (wide/narrow) 40/34dB
- Audio output power (at 10% dist. with an 8Ω load) :
  - Marine 0.2W
  - PMR 0.35W

The IC-M87 meets MIL-STD requirement and strict environmental standards for shock (MIL 810 C, D, E) and vibration (MIL 810 C, D, E).

Measurements made in accordance with EN301 178 2 or EN300 086. All stated specifications are subject to change without notice or obligation.

## OPTIONS

### BP-226 BATTERY CASE

Battery case for AA (R6)×5 alkaline cells.

### BP-227 Li-Ion BATTERY PACK

7.2V/1700mAh Li-Ion battery pack. Provides 15 hours operating time\* (approx. at 5 Watts). The same as that supplied. Operating temp. range: -20°C to +60°C

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

### BC-152 DESKTOP CHARGER

+ BC-147A/E AC ADAPTER  
Regularly charges the BP-227 in 9-10 hours. The same as that supplied.

### BC-119N DESKTOP CHARGER

+ AD-100 CHARGER ADAPTER  
+ BC-145A/E/V/UK 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-124 AC ADAPTER  
For rapid charging of up to 6 battery packs (Six AD-100s are required). Charging time: 2.5-3 hours.

### CP-17L CIGARETTE LIGHTER

CABLE WITH NOISE FILTER  
+ OPC-515L DC POWER CABLE  
For use with the battery charger, BC-152 or 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

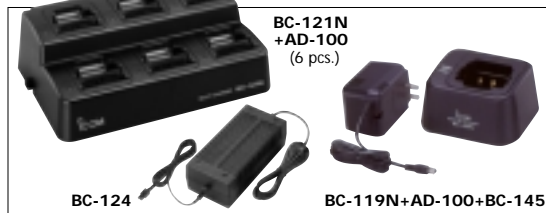
Full sized, water resistant construction corresponds to JIS grade 7 (1 m/30 min.). Equipped with an alligator type clip.

### MB-79 BELT CLIP

Alligator type belt clip.

### MB-86 SWIVEL BELT CLIP

Swivel belt clip. Prevents accidental dropping from your belt. The same as that supplied.



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