



FURUNO DEEPSEA WORLD

Full-duplex, 25 Watts

FURUNO®

MARINE VHF RADIOTELEPHONE

with built-in Class-A DSC and CH70 Watch Receiver

Model FM-8700

- Compact all-in-one unit design including radiotelephone, DSC Class-A facility and CH70 watch keeping receiver
- Fully meets ITU, IEC, ETSI, IMO for GMDSS and other national standards
- Full-duplex operation
- Precision PLL frequency synthesizer for high frequency stability as required for DSC operation
- Dual watch and multiple watch
- Continuous watch on CH70
- Prevention of accidental distress alert
- File editing for emergency readiness
- Automatic entry of own ship position and time with manual override



The FURUNO FM-8700 is a highly advanced marine VHF radio system designed to comply with the GMDSS carriage requirements for safety and general communications. A full-duplex, 25 W VHF radiotelephone, a DSC modem and a CH 70 Watch Receiver are packed into one compact unit.

The FM-8700 offers full-duplex voice communications on all ITU channels. Frequently used channels can be stored in memory. Channel selection is easily made with the rotary control.

A simple pressing of the CH16 key allows instant access to Channel 16.

The FM-8700 provides full functions of Class A DSC for distress alert transmission/reception and the general call formats. The FM-8700 maintains a continuous watch on CH 70 even while you are using another VHF channel.

The compact unit allows a flexible and space-saving installation on a navigation console or at the conning position.



The future today with FURUNO's electronics technology.

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Catalogue No. V-027

TRADE MARK REGISTERED
MARCA REGISTRADA

SPECIFICATIONS OF FM-8700

VHF Section

GENERAL CHARACTERISTICS

- 1. Class of Emission** G3E (voice), G2B (DSC)
- 2. Communication System** Full-duplex/Simplex/Semi-duplex
- 3. Channel Program**
 General version: 55 channels (RR Appendix 18)
 General, US channels,
 Weather channels
 U.S.A. version:
 Nordic version: General, Fish/Pleasure private
- 4. Display** 24 characters x 2 lines,
 character 5 x 7 dots, backlit
 LCD (dimmmable)

TRANSMITTER

- 1. Frequency Range** 155.00 - 161.475 MHz
- 2. RF Output Power** 25 W, reducible to 1 W
 US version: CH67, CH13 at 1 W, manual override for FULL
- 3. Frequency Stability** 1.5 kHz (-20°C to +55°C)
- 4. Time-out Timer (For FCC)**
 Deactivates the transmitter after an uninterrupted
 transmission of more than 5 minutes

RECEIVER

- 1. Frequency Range** 155.00 - 166.075 MHz
- 2. Receiving System**
 Double-conversion superheterodyne
 IF: 21.4 MHz and 455 kHz
- 3. AF Output Power** 2 W (internal 8 loudspeaker)
 1 mW (200 handset)
- 4. Audio Response** De-emphasis of 6 dB/oct +1/-3 dB
- 5. Sensitivity** -5 dBμV at SINAD 20 dB
- 6. Adjacent Channel Selectivity** 70 dB (+15°C to +35°C)

DSC Section

- 1. Distress Call and Message**
 Distress call attempt is transmitted as five consecutive calls.
 It is repeated after a random delay of between 3.5 and 4.5
 min from the beginning of initial call.

2. Message Storage

Receive: 50 distress messages plus 50 non-distress messages
 Transmit: 50 messages plus 99 files containing station ID,
 telephone No.

- 3. Interface** Nav data: IEC 61162-1
 Printer: Centronics w/Interface box

- 4. Alarm** Aural and visual on receipt of a DSC call
 (One dedicated output port also available)

- 5. Receiver Characteristics**
 DSC frequency: CH70
 Calling sensitivity: Symbol error rate 10⁻², input -3 dBμV
 Watch keeping: Continuous watch on CH70
 IF: 16.9 MHz and 455 kHz

- POWER SUPPLY** 24 VDC, W

ENVIRONMENT (IEC 60945 test method)

Temperature: -15°C to +55°C (Protected units)
 -25°C to +70°C (Exposed units)

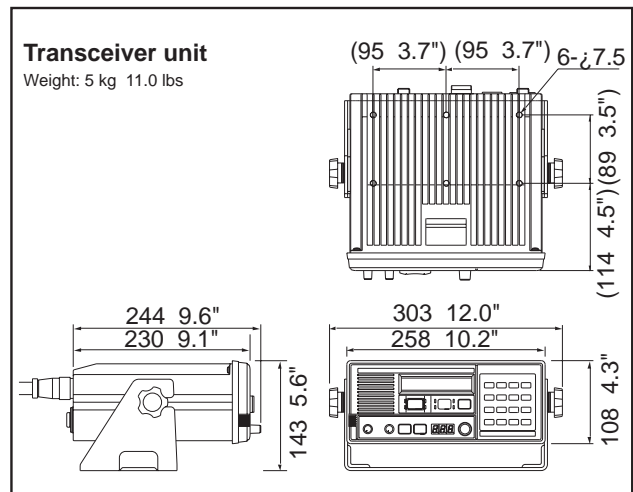
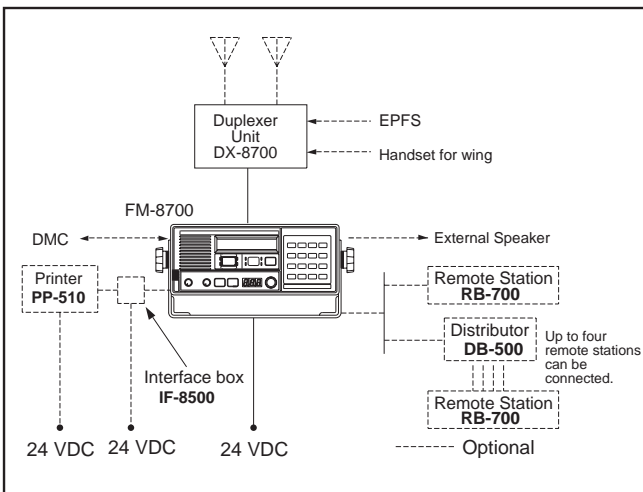
EQUIPMENT LIST

Standard

- | | |
|-------------------------------------------|--------|
| 1. Transceiver unit FM-8700 | 1 unit |
| 2. Duplexer unit DX-8700 | 1 unit |
| 3. Handset | 1 set |
| 4. Installation materials and spare parts | 1 set |

Optional

1. Whip antennas for VHF and DSC
2. Coaxial antenna cable
3. Remote Station RB-700
4. Distributor DB-500 (Required to connect 2 or more sets of the
 RB-700. Extension kit is required in DB-500 to connect 3 sets of
 RB-700 or more)
5. Extension handset (for wing)
6. Mic receptacle box (for wing)
7. Printer PP-510
8. Interface box IF-8500 for PP-510
9. AC-DC changeover unit



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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