The Furuno FM-2721 is a high-performance, 25 W marine VHF radiotelephone with class-D DSC (Digital Selective Calling) facilities and CH70 watchkeeping receiver. The equipment is designed for pleasure craft and small fishing boats operating under "simplified" GMDSS (Global Maritime Distress and Safety System) while the SOLAS Convention ships must be equipped with DSC facilities meeting full GMDSS requirements.

Current distress calling for non-SOLAS ships is made on CH16 by voice. However, watch of CH16 by the coastal stations as well as SOLAS ships will cease on July 1, 2005, totally switching to DSC watch on CH70. The DSC uses a digital signal to send information on MMSI (Maritime Mobile Service Identity), working frequencies, etc. so that a calling is addressed to a designated user or group who has DSC facilities. In an emergency, a distress alert can be initiated by pressing the dedicated distress button on the handset. The distress alert should be instantly acknowledged by ships equipped with DSC capability as well as coastal stations. DSC also allows users to call specific parties in routine traffic.

The FM-2721 has a built-in watch receiver to keep watching on CH70 while you are receiving or transmitting on another channel (with an additional antenna). The FM-2721 has a 25 W transceiver unit and its control is totally performed on a handset. The transceiver is a blackbox type and can be installed in the cockpit or flybridge. Two handsets provide the intercom facility.
SPECIFICATIONS OF FM-2721

VHF Transceiver

GENERAL CHARACTERISTICS
1. Rules and Regulations EN 301 025 V1.1.1
2. Class of Emission G3E (telephone), G2B (DSC)
3. Communication System Simplex/Semi-duplex
4. Channels All VHF channels according to ITU-R Radio Regulations Appendix S18, All channels in FCC Part 80, Max 20 Private channels where permitted by Administrations (preset by the service agent), 10 weather channels (USA and Canada, receive only).
5. Power Supply 12 V, 6 A max
6. Display 13 characters x 7 lines, character 7 x 5 dots, backlit LCD (dimmable)

TRANSMITTER
1. Frequency Range 155.00 - 161.475 MHz
2. RF Output Power 25 W, reducible to 1 W
   US Mode: CH67, CH13 at 1 W, manual override for full power.
   CH75, CH76 1 W only
3. Frequency Stability 1.5 kHz

RECEIVER
1. Frequency Range 155.00 - 166.075 MHz
2. Receiving System Double-conversion superheterodyne
   IF: 45.1 MHz and 455 kHz
3. AF Output Power 0.1 W (8 loudspeaker)
   1.5 mW (150 handset)
   3 W with optional loudspeaker
4. Audio Response De-emphasis of 6 dB/oct +1/-3 dB
5. Sensitivity -3 dBµV at SINAD 20 dB
6. Adjacent Channel Selectivity 70 dB

DSC Modem (Class-D)
1. Distress Call and Message Distress call is transmitted as five consecutive calls, repeated after a random delay 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 50 files containing 50 stations ID, 50 telephone No.
3. Interface Nav data: IEC 61162 (NMEA 0183)
   Input: $-GLL, $-GGA, $-ZDA, $-RMC
   Output: $-TLL
4. Alarm Audible and visual on receipt of distress, urgency or routine calls, Position error
5. Receiver Characteristics DSC frequency: CH70
   Sensitivity: Symbol error rate 10^-2, input -3 dBµV
   Watch keeping: Continuous watch on CH70

EQUIPMENT LIST
Standard
1. Transceiver unit FM-2721 1 unit
2. Handset HS-2721 1 unit
3. Bracket for handset RB-2721A 1 set
4. Installation materials 1 set
Optional
1. Handset HS-2721
2. Bracket for handset RB-2721B
3. External speaker MX910-X01
4. VHF antenna RA-106
5. VHF antenna 396-1
6. DC converter PC-208 (24-12 V)

HANDSET
HS-2721
Weight: 0.3 kg 0.7 lb

TRANSCEIVER UNIT
FM-2721
Weight: 2.5 kg 5.5 lb

BRACKET FOR HANDSET
RB-2721A
Weight: 0.8 kg 1.8 lb