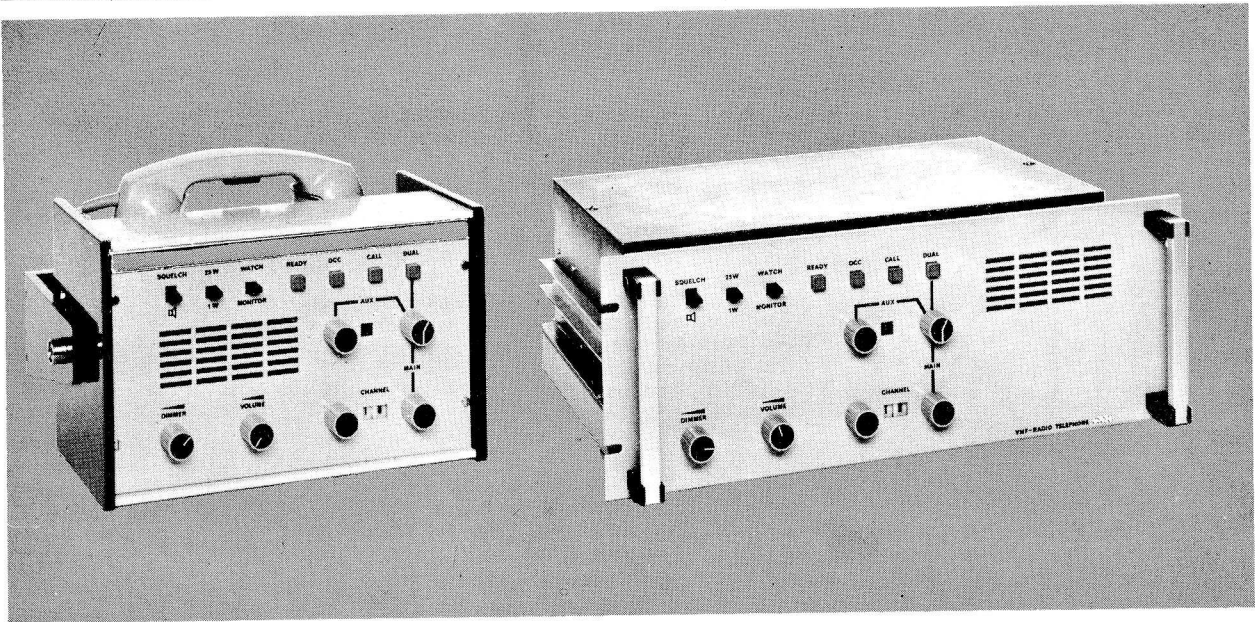


dansk radio aktieselskab



MARINE VHF FM RADIOTELEPHONE

SM 63

65 channels, simplex and duplex

Two channel listening

Completely transistorized

Integrated synthesizer

25 Watts output power

Low power consumption

Small size, simple installation

Modular construction

Sealed I.F crystal filter

Automatic selection of up to 4 control units

for up to date ship to ship and ship to shore telephone service, carefully designed to meet the new international specifications.

SM 63 is easy to install and easy to operate, all functions are remotely controlled from up to 4 control-boxes for 19" rack mounting or cabinet for desk or wall mounting.

The control unit has 3 channel selectors. 2 main selectors, one for each digit for the 57 international marine channels and 1 auxiliary selector for channel 16 and 7 channels for international or private service.

All the control boxes are identical which simplifies the operation. One of the boxes has the priority, usually the one on the bridge.

The radiotelephone can be supplied with a built-in VHF hybrid permitting simultaneous transmission-reception on one antenna.

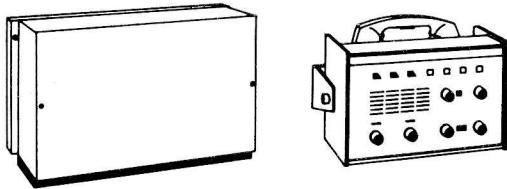
The station has 2 channel listening between one channel chosen by the main selector and one channel chosen by the auxiliary selector.

Transmitter and receiver are completely transistorized and mounted on small printed circuit boards for easy maintenance.

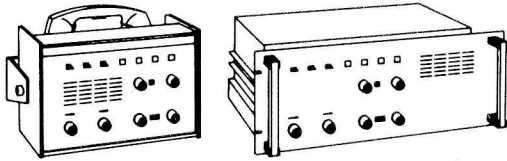
Microtelephones and loudspeakers on the bridge wings can be connected to the control boxes.

Dansk Radio Aktieselskab
33, Amaliegade, DK-1256 Copenhagen K, Denmark
telephone (01) 13 13 33
telegrams.: Dariose
telex 27058

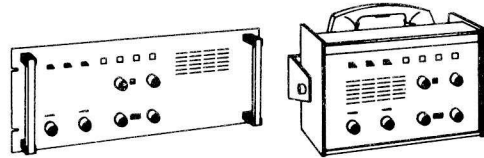
SYSTEMS



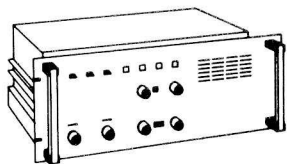
The most common system is the wall mounted transceiver with separate control box for desk or wall mounting.



A more advanced system is made with the wall or rack mounted transceiver and up to 4 19" rack mounted or wall mounted control boxes.

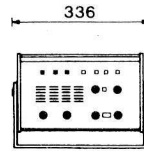


The transceiver can be operated from all the boxes, but one of them is given the priority and if in use it cannot be disturbed by the others.

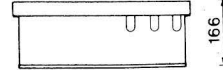
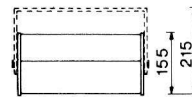
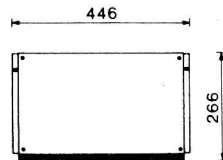


The most simple system is a 19" rack mounted transceiver with control unit mounted on the front. Bridge wing extension with microtelephones and loudspeakers can be connected to all control boxes.

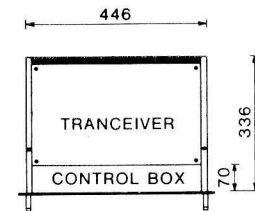
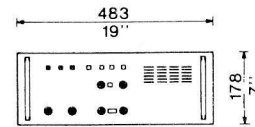
CONTROL BOX IN KABINET



TRANSCIVER



19" CONTROL BOX WITH TRANSCIVER



TECHNICAL DATA

The SM 63 complies with most countries relevant specifications for international maritime VHF Radio-telephones.

General

- Frequency range : 156.025-157.425 Mhz
 160.625-162.025 Mhz
 (privat range:
 157.425-157.825 Mhz)
- Number of channels : 65 (57 international maritime VHF channels and provision for up to 8 dual or private national channels)
- Operation mode : Simplex and duplex
- Channel spacing : 25 KHz
- Modulation : F3 pre-deemphasis 6 dB/oct.
- Crystals : Synthesizer to obtain the 57 international channels. Dual and private channels require additional crystals
- Transistorization : Fully transistorized
- Power supply : $\pm 10\%$ for all performances
 variation + 15% - 20% for reduced performance
- Power consumption
 stand-by : 25 Watts
 transmit full power : 130 Watts
 transmit reduced power : 80 Watts
- Supply voltage : 230, 220, 210, 115, 110, 105 Volts. 50-60 Hz
- RF impedance : 50 ohms

Transmitter

- Power output at standard voltage : 25 Watts - 1 Watt
 Max. deviation : ± 5 KHz

Receiver

- Sensitivity : $< 0.5 \mu V$ ($1 \mu V$ EMF)
 20 dB signal/noise (by use of private channels the sensitivity might be reduced to $1.8 \mu V$ EMF)
- IF frequency : 10.7 MHz
- Output power : > 2 W
- Simultaneous : Receiver switched between 2 reception channels. Channel I is switched on for 1/10 second every second, and if a signal is received the receiver stops on this channel. Channel II is received with 1/10 second interruption. This will not affect the intelligibility.
- Selective call : Space is provided for at selective call receiver

Control unit includes

- : Switch for reduced power
- Squelch on/of
- Volume control knob
- Auxiliary channel selector (channel 16 or optional other dual or/and private channels)
- Light dimmer
- Two channel listening switch (dual watch)
- Main channel selectors (decimal selector channel 1-28 and 60-88)
- Lamp indicator of
 - (1) ready
 - (2) set occupied
 - (3) two channel listening
 - (4) call