

SUMMARY OF DATA

PURPOSE

To provide direct inter-ship communication and communication between ship and harbour, docking or pilot services.

TYPE OF TRANSMISSION AND RECEPTION

F3 (Frequency modulated telephony).

FREQUENCY RANGE

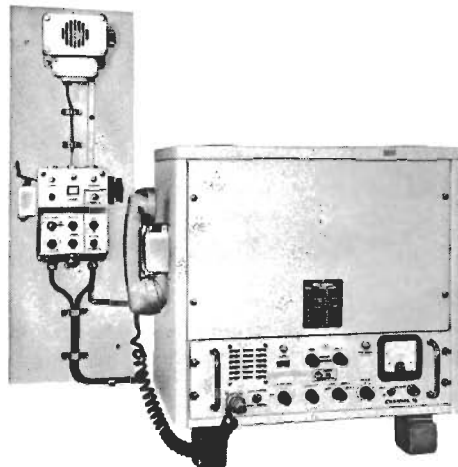
Receiver

Simplex 156.3-156.8 MHz

Duplex 160.65-162 MHz

Transmitter

156.05-157.4 MHz (A separate transmitter having a frequency coverage similar to that of the duplex receiver must be used when working on duplex channels).



BRIEF TECHNICAL DESCRIPTION

The equipment comprises a 14-20 watt VHF F.M. transmitter and a double superheterodyne receiver. The receiver employs separate simplex and duplex r.f. stages with separate mixers and second local oscillators, and common i.f. and a.f. stages. The first local oscillator frequencies are provided by the synthesiser, which also provides drive for the transmitter. The equipment operates on 28 channels, spaced by 50 kHz, and incorporates automatic reversion to channel 16.

MAJOR UNITS

NSN

5820-99-972-7805	Transmitter-Receiver radio (main unit)
5820-99-972-7806	Transmitter radio sub-assembly
5820-99-972-7807	Receiver radio sub-assembly
5820-99-972-7808	Radio frequency head (r.f. head)
5820-99-972-7809	Control, radio set (comprising local control panel and main and 50 V power supply units)
5820-99-972-7810	Synthesiser, electrical frequency
5820-99-972-7811	Power supply (50 V)
5820-99-972-7812	Duplexer
5820-99-972-7813	Control, radio set, remote (remote control box)
5985-99-972-7814	Aerial (antenna)
5965-99-972-7818	Handset
5820-99-972-7819	Power supply (main p.s.u.)
5915-99-975-7820	Filter, low pass (antenna filter)

PHYSICAL DATA

	<u>Height</u>	<u>Width</u>	<u>Depth</u>	<u>Weight</u>
Transmitter Receiver Unit	22½ in.	20¾ in.	14 in.	100 lb
Control, Radio Set, remote	9 in.	6½ in.	3¾ in.	10½ lb

ELECTRICAL CHARACTERISTICS

R.F. power output	10-12 watts with duplexer
Channel spacing	50 kHz
Frequency stability	± 0.002% over the temperature range -10 °C to +40 °C
Sensitivity	1 watt audio output for 2µV r.f. input

CONTROL CIRCUITS

May be operated locally or remotely from either of two positions.

CONTROL FACILITIES

OFF/LOC/REM 1/REM 2 switch (Main Unit only)

LOW POWER/HIGH POWER switch (Main Unit only)

OFF/HIGH POWER/LOW POWER switch (Remote Control Box only)

CHANNEL SELECTION switches

CHANNEL 16 OUT/IN switch and RELEASE button

11 position METER switch (Main Unit only)

LS VOLUME control.

SQUELCH control

Indicator lamp DIMMER control (Remote Control Box only)

Press-to-transmit switch in telephone handset

POWER REQUIREMENTS

Mains Input

100-150 V)
190-240 V)

40-60 Hz

Receive

150 W

Transmit

200 W (low power)
270 W (high power)

ANTENNA SYSTEM

Folded dipole.

HANDBOOK

BR 2305.

ESTABLISHMENT LIST

E1326.

INSTALLATION SPECIFICATION

B920.

MAINTENANCE SCHEDULE