

Technical Data

VHF RT145

General:	25 kHz	Power supply:	12V DC or 24V DC	Receiver:	155,000 - 158,600 MHz
Channel separation:	Phase	Power consumption:	Stand by = 0,7 Amp.	Frequency range simplex:	159,600 - 163,200 MHz
Modulation:	Simplex and semi-duplex	Voltage variation:	Transmit = 5 Amp.	Frequency range semi-duplex:	0,25 uV pd 12 dB SINAD
Operation:	-20°C to +55°C	(with reduced data according to international standards)	-10% to +30%	Sensitivity:	0,8V RMS/300 ohm
Temperature range:	Dimensions:	Height = 220 mm		AF output:	Less than 5%
Frequency stability:	Width = 320 mm	Depth = 145 mm		Distortion:	
Antenna impedance:	Weight:	7,5 kg		Transmitter:	155,000 - 158,600 MHz
				Frequency range normal:	159,600 - 163,200 MHz
				Frequency range special:	25 Watt
				Reduced RF output:	1 Watt
				Distortion:	Less than 5%

Technical Data

VHF Control Units C401 - C402 - C403

All international maritime VHF channels	20	C402 only	Selective call decoder recommended by CCIR	C403 only	All international maritime VHF channels and the channel required in USA (U.S. mode)
Private channels:	-20°C to +55°C	Signal/Noise ratio:	0 dB	Individual call	50 mSecs.
Temperature range:	3 Watt/4 ohm	Reaction time:	All ships call	12 mSecs.	
AF output power:	0,55V RMS/200 ohm	Wait:	Individual call	220 mSecs.	
Telephone output:	Less than 5%	Acoustic Alarm:	All ships call	220 mSecs.	
Distortion:	Height = 220 mm	Visual Alarm:	Built-in loudspeaker		
Dimensions:	Width = 120 mm		Two light diodes, one for individual call and one for all ships call.		
Weight:	Depth = 90 mm				
	1,4 kg				



SAILOR VHF RT143

SAILOR VHF RT143 is a fully transistorized marine VHF radiotelephone for ship/ship and ship/shore communication. SAILOR VHF RT143 is a multi-channel set in which all the international maritime VHF channels are built-in together with an optional 4 private channels, selected as simplex channels and close to the international maritime VHF frequency band. SAILOR VHF RT143 has full duplex facilities. The set is provided with a built-in duplex filter, making duplex communication possible on one aerial. SAILOR VHF RT143 is provided with built-in DUAL WATCH facility, enabling the operator to listen to two channels at the same time, one of which - normally channel 16 - is a preference channel.

• For further information please see special brochure.



SAILOR VHF RT144C

SAILOR VHF RT144C is a fully transistorized marine VHF radiotelephone for ship/ship and ship/shore communication. SAILOR VHF RT144C uses a digital synthesizer for frequency generation. The set has only one crystal to provide all the international maritime VHF channels and 5 optional private channels. SAILOR VHF RT144C is a simplex and semi-duplex VHF radiotelephone. SAILOR VHF RT144C is provided with built-in DUAL WATCH facility, which enables the operator to listen to two channels at the same time, one of which - normally channel 16 - is a preference channel. Quick selection of channel 16 is also possible.

• For further information please see special brochure.

Power Supply N163

SAILOR Power Supply N163 can supply the complete VHF programme from AC mains 222/127/110 Volt AC. SAILOR Power Supply N163 can only be used when RT143 - RT144 and RT145 are 24 Volt DC version.

Dimensions: Height = 225 mm
Width = 167 mm
Depth = 95 mm



S. P. RADIO A/S . 9200 AALBORG SV . DENMARK . TLF. (08) 18 09 99



SAILOR Multi-Remote

VHF RADIOTELEPHONE



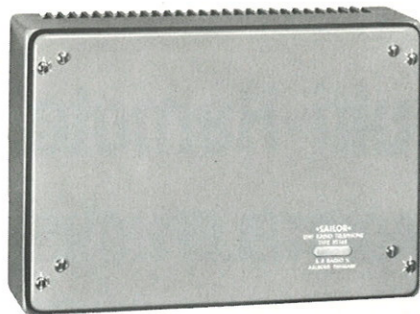
Sai or

VHF Programme
RT145
C401 C402 C403
RT143 RT144C



S.P. RADIO A/S - AALBORG - DENMARK

SAILOR VHF RT145



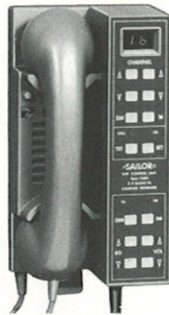
General Description
SAILOR VHF RT145 is a marine VHF radiotelephone for ship/ship and ship/shore simplex and semi-duplex communication. SAILOR RT145 uses a digital synthesizer for frequency generation. The set has only one crystal to provide all channels and the 20 optional private channels.

SAILOR VHF Control Unit C401



General Description
SAILOR VHF Control Unit C401 is designed to be used in conjunction with the SAILOR VHF RT145. SAILOR C401 has keyboard control of all functions. Channel selector, volume control, squelch control and dimmer are all operated by push buttons. SAILOR C401 can be installed up to 100 metres away from the VHF RT145.

SAILOR VHF Control Unit C402



General Description
SAILOR VHF Control Unit C402 is designed to be used with the VHF RT145. SAILOR C402 has keyboard control of all functions. Channel selector, volume control, squelch control and dimmer are all operated by push buttons. SAILOR C402 can be installed up to 100 metres away from the VHF RT145. SAILOR C402 has built-in selcall facilities as recommended by CCIR.

SAILOR VHF Control Unit C403



General Description
SAILOR VHF Control Unit C403 is designed to be used with the VHF RT145. SAILOR C403 has keyboard control of all functions. Channel selector, volume control, squelch control and dimmer are all operated by push buttons. SAILOR C403 can be installed up to 100 metres away from the VHF RT145. SAILOR C403 can be switched between the international maritime VHF channels and the channels required in USA.

SAILOR Remote Control Box H410



General Description
SAILOR Remote Control Box H410 is designed to be used with the VHF Control Units C401, C402 or C403 when there are more than one operating point. 4410 switches on and off the control unit. SAILOR H410 can be programmed (with a jumper) for preference. SAILOR H410 ensures that only one control unit at a time can be switched on.

SAILOR Splitter Box H411



General Description
SAILOR Splitter Box H411 can be used in an installation where the multicable has to be split into two directions. SAILOR H411 can also be used as connection box for the multicable.

Sailor



Multi-Remote VHF System

SAILOR Multi Remote VHF System has been developed on the fact that an installation always consists of a VHF-unit, a microtelephone handset and an extra loudspeaker. S. P. Radio has integrated the controls, the microtelephone handset and the loudspeaker in one handy unit, which gives the following flexibility on different installations.

The most simple installation consists of the SAILOR VHF RT145 and e.g. SAILOR VHF Control Unit C401. The transmitter and receiver box RT145 can be mounted hidden away close to the aerial feed-through or the batteries.

The compact VHF Control Unit can easily be mounted at the most convenient location for operation because of its small dimensions.

The control unit is delivered with a multicable, 150 cm long, and a plug for quick connection to VHF RT145. The multicable can be extended up to 100 metres.

The installation can be carried out in such a way that there are more than one operating point but only one VHF Control Unit. Then the control unit can be moved from one operation point to another, e.g. from the fly bridge to the wheel-house and vice versa.



Introduction

SAILOR VHF programme is developed and produced in Europe's leading factory dealing in maritime radiotelephones. The annual output exceeds 20,000 sets. Years of experience with VHF and SSB radiotelephones working under the worst conditions imaginable, from the African rivers to the harsh environments of the Arctic etc., has enabled S. P. Radio to develop a VHF programme which not only complies with the international CEPT and national requirements for maritime VHF radiotelephones but also meets the requirements of the user in every respect.

SAILOR VHF Programme

SAILOR VHF programme, in addition to the well-known VHF sets RT143 and RT144C, consists also of a Multi-Remote VHF System built-up of the units RT145 - C401 - C402 - C403 etc. These units can be combined in various ways giving a flexibility until now unknown regarding operation and installation.

Channel Programming

SAILOR VHF RT145 is programmed for all the 55 international maritime VHF channels but a further 20 private channels can be programmed. The programming takes place in a PROM located in the VHF RT145.

Programming Features

- All private and weather channels, which are used in the maritime VHF-band. Frequency range for the transmitter and receiver are 155.0 - 158.6 MHz and 159.6 - 163.2 MHz.
- The simplex channels 75 and 76 with reduced output when these are released by the authorities.
- One or more of the channels can be blocked either totally or the transmitter only.
- Automatic reduction to 1 Watt can be programmed on one or more of the channels.
- Optionally the RT145 can be programmed so that one or more of the channels are provided with an external control, e.g. for blocking of auxiliary receivers (river traffic).

Selcall

The VHF Control Unit C402 is provided with a selcall decoder. Direct calls from the coast station to a specific selcall number (like your ordinary telephone) is possible. When there is a call for you an acoustic alarm will be heard for 10 secs and a lamp will indicate that you have been called. It will therefore be unnecessary to listen to the traffic lists of the coast stations.

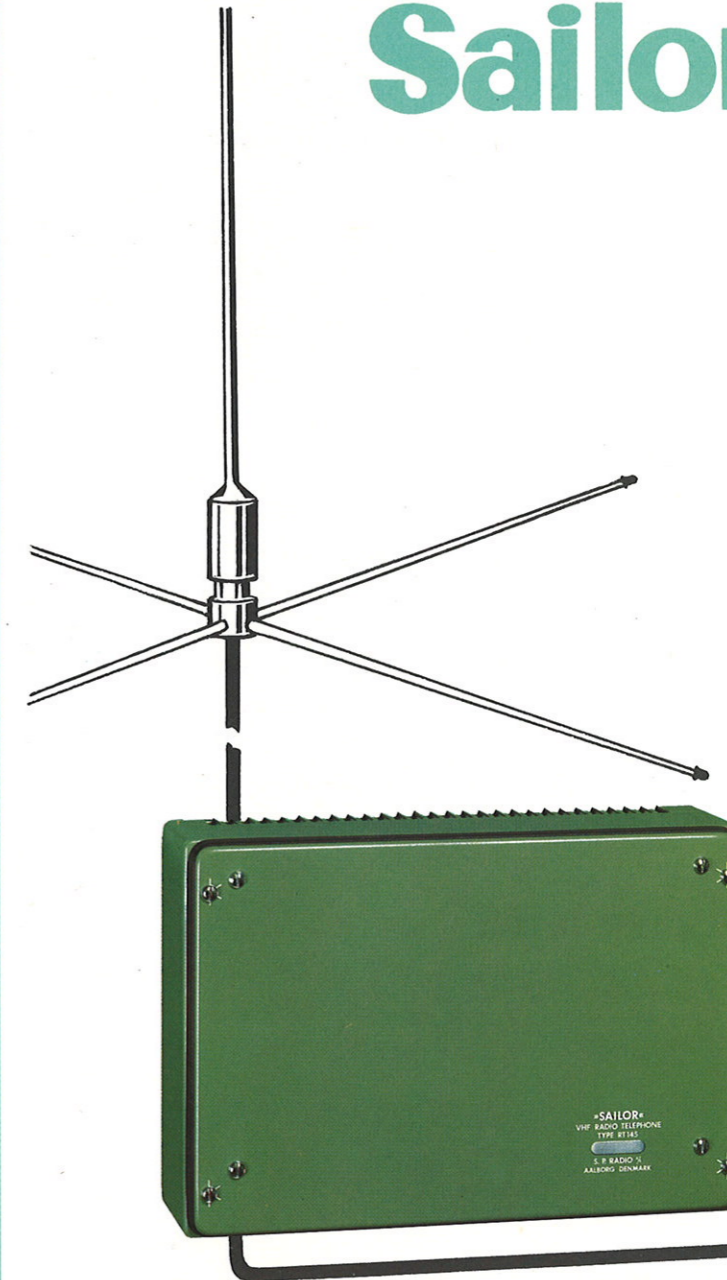
All ships call from the coast station with distress message, gale warnings, navigational warnings etc. will be received.

Service

SAILOR VHF RT145 is designed on the well-known principles of SAILOR VHF RT144C, which is a proven construction with high reliability. Both the VHF and the control units are built-up of modules, giving easy and rapid maintenance.

Both the VHF and the control unit are installed on mounting plates from where the units can easily be removed or replaced because of the self-locking suspension fittings.

Sailor



The most comprehensive installation for SAILOR Multi-Remote VHF System is one with an unlimited number of operating points, comprising SAILOR Splitter Boxes

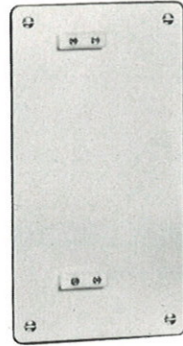
ing on
SAILOR
ponding
Boxes

SAILOR Connection Box H412



General Description
SAILOR Connection Box H412 can be used in installations with one control unit, where the multicable has to be extended.

SAILOR Mounting Plate H413



General Description
SAILOR Mounting Plate H413 enables quick and easy mounting of VHF Control Unit.
SAILOR Mounting Plate H413 is supplied with every VHF Control Unit. An extra Mounting Plate H413 can be provided if the VHF Control Unit has to be moved from one location to another.

SAILOR Multicable H414



General Description
SAILOR Multicable H414 is used to extend the cable between the VHF RT145 and the VHF Control Units or the Remote Control Box H410. SAILOR Multicable H414 is a specially designed 17 core multicable having 2 screened leads and 4 leads of greater diameter.



SAILOR Multi-Remote
VHF RADIOTELEPHONE



Sai or

VHF Programme
RT145
C401 C402 C403
RT143 RT144C



S.P. RADIO A/S - AALBORG - DENMARK



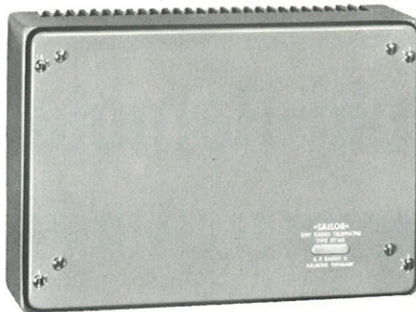
Preference

In a multi-remote installation all VHF Control Units can have full-function of all operating facilities. Only one Control Unit at a time can be in operation. All the other remote control boxes show occupied and cannot be switched on. One

or more Control Units can have preference so that they can break-in at any time and have the full-function of the station. For the bridge installation it is important for the Control Unit to have preference. If there are more than one operating point on the bridge, they can all have preference.

SAILOR VHF RT145 and a number of Control Units e.g. C401 and a corresponding number of SAILOR Remote Control H410 one for every operating point.

SAILOR VHF RT145



General Description

SAILOR VHF RT145 is a marine VHF radiotelephone for ship/ship and ship/shore simplex and semi-duplex communication. SAILOR RT145 uses a digital synthesizer for frequency generation. The set has only one crystal to provide all channels and the 20 optional private channels.

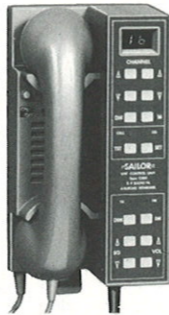
SAILOR VHF Control Unit C401



General Description

SAILOR VHF Control Unit C401 is designed to be used in conjunction with the SAILOR VHF RT145. SAILOR C401 has keyboard control of all functions. Channel selector, volume control, squelch control and dimmer are all operated by push buttons. SAILOR C401 can be installed up to 100 metres away from the VHF RT145.

SAILOR VHF Control Unit C402



General Description

SAILOR VHF Control Unit C402 is designed to be used with the VHF RT145. SAILOR C402 has keyboard control of all functions. Channel selector, volume control, squelch control and dimmer are all operated by push buttons. SAILOR C402 can be installed up to 100 metres away from the VHF RT145. SAILOR C402 has built-in selcall facilities as recommended by CCIR.

Controls

VHF Control Units C401 - C402 - C403

All functions are keyboard controlled.

ON/OFF

To switch the VHF set ON or OFF.

Not in function when remote controlled by H410.

Display

The LED-display shows the selected channel number.

CHANNEL

The two keys to the right shift the unit digit of the channel number up or down.

The two keys to the left shift the tens digit of the channel number up or down.

D.W. (DUAL WATCH)

When the »D.W.« key is pressed and the handset is in its holder, the receiver is listening to the selected channel and is watching channel 16 (preference channel). The display flashes showing the selected channel number and channel 16.

If a signal is received on channel 16, the receiver will listen continuously to channel 16, until the signal disappears. The display shows channel number 16.

If the handset is removed from its holder, the Dual Watch is switched off and the selected channel is ON.

When the »D.W.« key is pressed again the Dual Watch is switched off.

16. (Distress and Calling)

When the key »16« is pressed, channel 16 is quickly selected. Press the key »16« again, and the previous channel is selected.

DIM

The intensity of the LED-display and the illumination of the symbols can be controlled in four steps.

1W

When the key »1W« is pressed, the LED »1W« will light, and the transmitter output is reduced to less than 1 Watt.

SQ

The squelch sensitivity can be controlled in 15 steps.

Adjustment of the best squelch sensitivity:

Press the key with the arrow »up« until the white noise is heard in the loudspeaker. Then press the key with the arrow »down« until the white noise in the loudspeaker just stops. The adjustment is to be done on a channel without signal.

VOL

The volume can be controlled in 15 steps.

C402 only

SET

When the key »SET« is pressed the selcall decoder will be reset after a call. The acoustic and the visual alarm will be cancelled.

CALL

The LED will light when an individual call has been received. The acoustic alarm will stop after 10 secs.

CQ

The LED will light when an all ships call has been received. The acoustic alarm will be ON until the key »SET« is pressed.

TST

When the key »TST« is pressed the selcall decoder will be tested. First the acoustic alarm and the individual call LED will be ON and shortly after the all ships call LED will be ON.



C403 only

US

When the key »US« is pressed, the frequencies used in USA (U.S.-mode) are selected, the LED »US« will light.

Remote Control Box H410

ON

To switch the VHF set ON. (the ON/OFF key on C401 - C402 - C403 is not in function).

OFF

To switch the VHF set OFF.

IN USE

The LED will light when one of the Control Units C401 - C402 - C403 is in use.

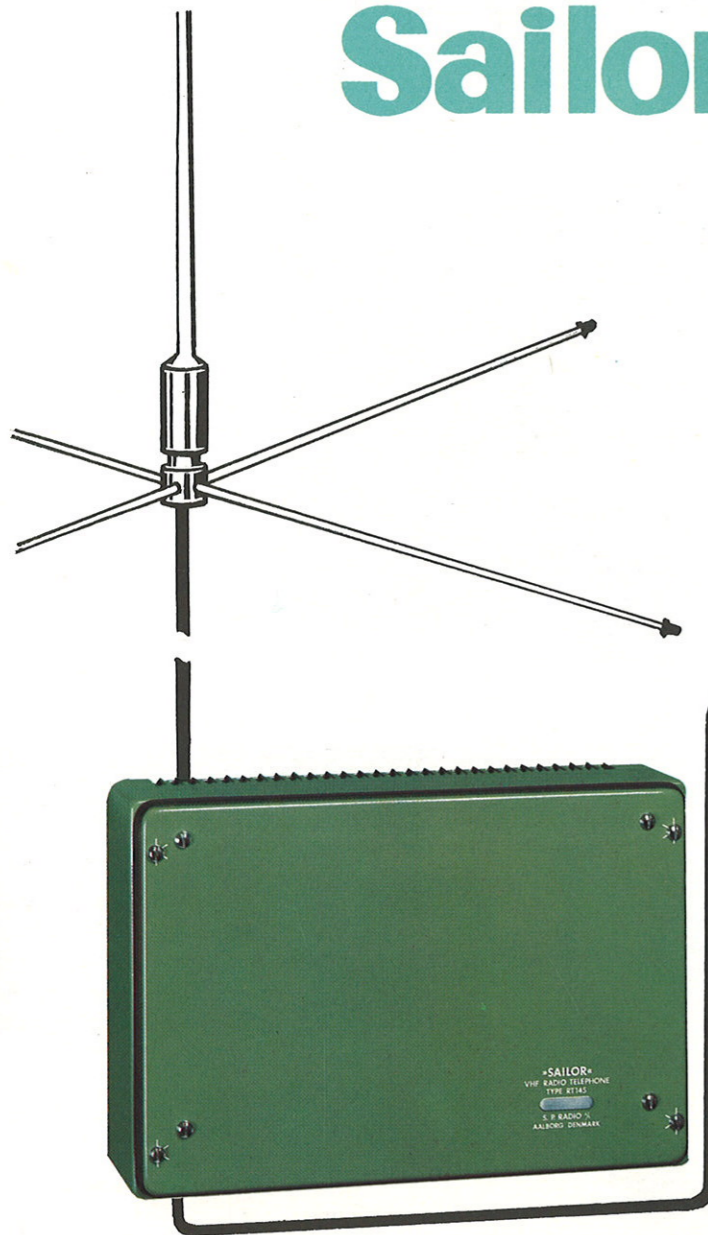
Preference

One or more of the Remote Control Boxes H410 can be programmed for preference.

The remote control box with preference can always be switched on even when the LED »IN USE« is alight.

The remote control box without preference, can not be switched on when the LED »IN USE« is alight.

Sailor



Multi-Remote VHF System

SAILOR Multi Remote VHF System has been developed on the fact that an installation always consists of a VHF-unit, a microtelephone handset and an extra loudspeaker. S. P. Radio has integrated the controls, the microtelephone handset and the loudspeaker in one handy unit, which gives the following flexibility on different installations.

The most simple installation consists of the SAILOR VHF RT145 and e.g. SAILOR VHF Control Unit C401. The transmitter and receiver box RT145 can be mounted hidden away close to the aerial feed-through or the batteries.

The compact VHF Control Unit can easily be mounted at the most convenient location for operation because of its small dimensions.

The control unit is delivered with a multicable, 150 cm long, and a plug for quick connection to VHF RT145. The multicable can be extended up to 100 metres.

The installation can be carried out in such a way that there are more than one operating point but only one VHF Control Unit. Then the control unit can be moved from one operation point to another, e.g. from the fly bridge to the wheel-house and vice versa.

Introduction

SAILOR VHF pre leading factory output exceeds radiotelephones from the African has enabled S. P. ly complies with for maritime VHF of the user in ev

SAILOR VHF

SAILOR VHF pr RT143 and RT14 built-up of the u be combined in regarding opera

Channel Prog

SAILOR VHF RT time VHF chann grammed. The p VHF RT145.

Programming Fe

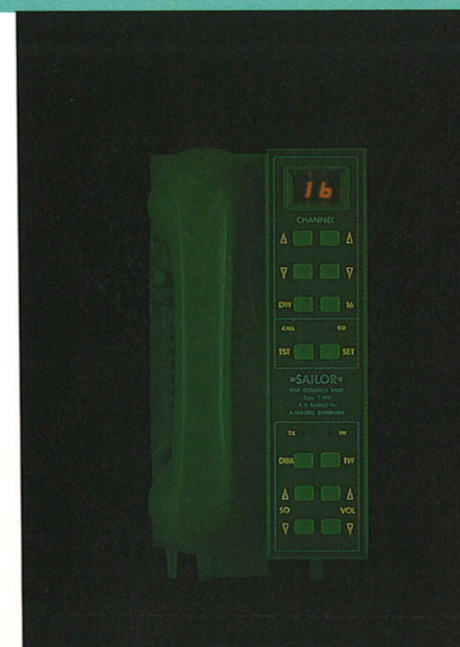
- All private and VHF-band. Fre 155.0 - 158.6 M
- The simplex ch are released b
- One or more of transmitter on
- Automatic rec more of the ch
- Optionally the the channels a king of auxilia

Selcall

The VHF Contro Direct calls from your ordinary tel acoustic alarm that you have be to the traffic list All ships call fr warnings, navig

Service

SAILOR VHF RT SAILOR VHF RT liability. Both the les, giving easy Both the VHF ar from where the the self-locking



ILLUMINATION

SAILOR VHF Control Units can be operated under all lighting conditions. The lettering on the control panel is illuminated from the rear so the control unit can be operated in complete darkness. The channel read-out is a LED-display of high efficiency, covered with a circular polarizer for contrasts improvement. This means that reading of the channel number can be achieved even in the strongest sunshine.