

# Connection to **External Equipment**

A great many possibilities have been incorporated to use the receivers R1119 and R1120 in conjunction with transmitters - telex and facsimile

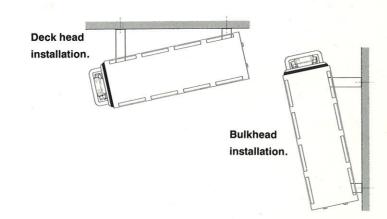
Connection terminal board is placed in SAILOR N1405 AC/DC Power

# **Dimensions**

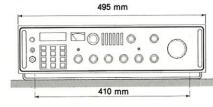
Installation possibilities for SAILOR receivers R1119 and R1120 in cabinet H1225.

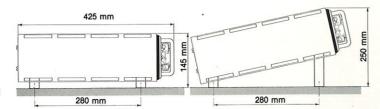
The receiver cabinet H1225 can be tilted-up in 5 steps.

20 mm clearance around the cabinet. 50 mm clearance of rear side of cabinet.



Desk top installation.





# **AC/DC Power Supply**

SAILOR N1405 is a combined AC/DC power supply intended to supply SAILOR R1119 or SAILOR R1120 from AC mains or 24V battery.

SAILOR N1405 switches automatically and with no break from AC to DC supply if mains

SAILOR N1405 can supply R1119 or R1120 when installed in SAILOR 19" rack or when installed in receiver cabinet H1225.

AC: 110/127/220/237 + 10%, 50 - 60 Hz.

DC: 24V DC - 10% + 30%.

# **Typical Power Consumption:**

AC: 0.12 Amp. at 220V.

DC: 1,5 Amp. at 26.4V.

Dimensions: Height: 270 mm.

Width: 205 mm. Depth: 75 mm.

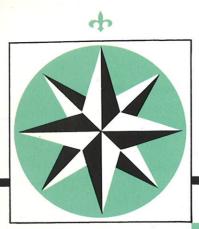
Weight: 3.8 kg.





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





# Sailor Receiver programme 1000



Main Receiver R1120 10 kHz - 30 MHz SSB Telephony - Telegraphy - Telex



**Marine Communication** Receiver R1119 10 kHz - 30 MHz SSB Telephony

R1119



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

# Marine Communication Receiver R1119

SAILOR R1119 is a marine communication receiver developed using the most advanced techniques and complies with requirements such as UK MPT 1224 and CEPT.

SAILOR R1119 is designed for reception of the following: Single Side Band telephony. Broadcast.



# **Technical Data R1119**

Antenna Impedance:

Below 4 MHz: 50 ohm or 10 ohm/250 pF. Above 4 MHz: 50 ohm.

Frequency Range:

10 kHz - 30 MHz.

Frequency Stability:

0 - 40°C less than 25 Hz.

Clarifier:

Control range + 150 Hz.

Mode of Operation:

A2 - A2H - A3 - A3A - A3H - A3J - F1 - 2.4F4. A2A - H2A - A3A - R3E - H3E - J3E - F1B - F1C.

Selectivity:

SSB (A3J) -6 dB at +350 and +2700 Hz, -60 dB at -300 and +3400 Hz. AM (A3H) -6 dB at +2.7 kHz, -60 dB at +10 kHz.

Sensitivity 20 dB SN/N:

MF (J3E): less than 16 dB/1 uV MF (H3É): less than 30 dB/1 uV HF (J3E): less than 10 dB/1 uV HF (H3É): less than 24 dB/1 uV

**Automatic Gain Control:** 

SSB AGC with fast attack time and long hang time. Telex AGC with noise blanking characteristics.

Audio Output:

4 Watt into 8 ohm. Line: 0 dBm into 600 ohm.

Nominal Temperature Range: 0°C to +40°C.

Operation Temperature Range: -15°C to +55°C.

# **Technical Data R1120**

Antenna Impedance:

Below 4 MHz: 50 ohm or 10 ohm/250 pF.

Above 4 MHz: 50 ohm

Frequency Range: 10 kHz - 30 MHz.

Frequency Stability: 0 - 40°C less than 25 Hz.

Clarifier: Control range + 150 Hz.

BFO: Beat note variation -500 Hz to +180 Hz.

Modes of Operation:

A1 - A2 - A2H - A3 - A3A - A3H - A3J - F1 - 2.4F4. A1A - A2A - H2A - A3E - H3E - R3E - J3E - F1B - F1C.

Selectivity: SSB

(J3E) -6 dB at 350 Hz and 2700 Hz, -60 dB at -300 Hz

AM/WIDE

and +3400 Hz.

(H3E) -6 dB at + 2.9 kHz, -60dB at + 9.5 kHz.

(A2A) -6 dB at + 1.2 kHz, -60 dB at + 1.2 kHz.

(A1A) -6 dB at + 0.7 kHz, -60 dB at + 1.7 kHz.

(A1A) -6 dB at + 0.19 kHz, -60 dB at + 0.6 kHz. INTERMEDIATE NARROW VERY NARROW

Sensitivity 20 dB SN/N:

MF (J3E): less than 16 dB/1 uV. MF (H3E): less than 30 dB/1 uV. HF (J3E): less than 10 dB/1 uV. HF (H3E): less than 24 dB/1 uV. HF (A1A): less than 5 dB/1 uV.

**Automatic Gain Control:** 

SSB AGC with fast attack time and long hang time. TELEX AGC with noise blanking characteristics.

**Audio Output:** 

4 Watt into 8 ohm Line: 0 dBm into 600 ohm.

Nominal Temperature Range: 0°C to +40°C.

Operation Temperature Range: -15°C to +55°C.

In position AUX a special TELEX FILTER or a LOWER SIDE BAND FILTER can be supplied.



### Introduction

SAILOR receivers R1119 and R1120 have been developed and produced in Europe's leading factory dealing in maritime radiotelephones. The factory has an annual output exceeding

Years of experience with communication receivers working under the most harsh environments have enabled S. P. RADIO to develop these receivers, which not only comply with the requirements of the authorities, but also the needs of the user in

SAILOR receivers R1119 and R1120 are units from the popular SAILOR short wave programme 1000.

# **Duplex** (Long Range Reception)

To ensure long range reception and good duplex performance, the receivers are provided with a specially designed front end with high order tunable RF filters, both of which give exceptionally good large signal capabilities and also offer the opportunity for matching into the aerial conditions prevailing on board ships. This front end system, combined with the large dynamic range of the receiver and other features, ensures noiseless reception in even the most difficult environment on board ships.

# Keyboard

The receivers R1119 and R1120 use a digital synthesizer, for frequency generation, which can be set to any receiving frequency in the range from 10 kHz to 30 MHz in 100 Hz steps.

Both receivers are equipped with a keyboard for keying in the receiving frequency giving quick and safe operation.

If the required receiving frequency is unknown, manual search over the frequency band is possible.

The frequency selected is displayed on a six segment liquid crystal display (LCD).

# Simple Operation

The operation of the receivers is very simple. The high order RF filters are automatically selected, so that the only thing to be done when changing frequency is

## Select frequency - Tune aerial.

Continuous tuning is activated by pressing the decimal point key on the KEYBOARD.

The tuning wheel is disabled by pressing the zero key on the KEYBOARD.

# Installation

SAILOR receivers R1119 and R1120 are designed to fit into SAILOR 19" rack system, which is used in the SAILOR short wave programme 1000.

SAILOR receivers R1119 and R1120 also fit into the compact cabinet H1225 as shown in this brochure.

SAILOR receivers R1119 and R1120 are supplied from the AC/DC Power Supply N1405 which can be mounted hidden



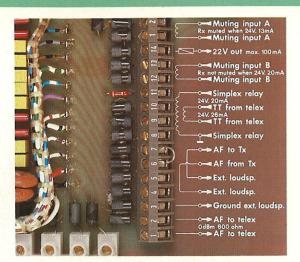
# **Main Receiver R1120**

SAILOR R1120 is a main receiver developed using the most advanced techniques and complies with IMCO's regulation for SAFETY OF LIFE AT SEA (SOLAS) and the most demanding requirements such as UK MPT 1201 and CEPT.

SAILOR R1120 is designed for reception of the following: Single Side Band telephony.

Broadcast

Signals for TELEX and FACSIMILE equipment.



# Connection to **External Equipment**

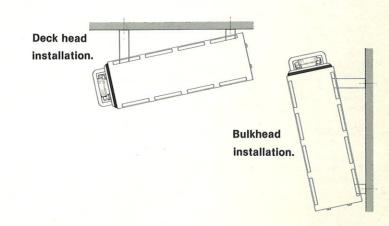
A great many possibilities have been incorporated to use the receivers R1119 and R1120 in conjunction with transmitters - telex and facsimile equipment.

Connection terminal board is placed in SAILOR N1405 AC/DC Power Supply.

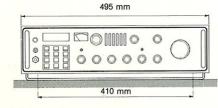
# **Dimensions**

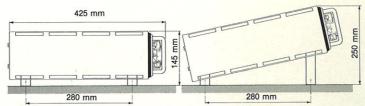
Installation possibilities for SAILOR receivers R1119 and R1120 in cabinet H1225. The receiver cabinet H1225 can be tilted-up in 5 steps.

20 mm clearance around the cabinet. 50 mm clearance of rear side of cabinet.



Desk top installation.





# **AC/DC Power Supply**

SAILOR N1405 is a combined AC/DC power supply intended to supply SAILOR R1119 or SAILOR R1120 from AC mains or 24V battery.

SAILOR N1405 switches automatically and with no break from AC to DC supply if

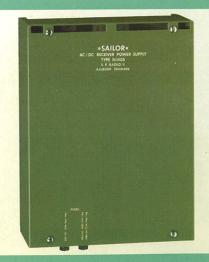
SAILOR N1405 can supply R1119 or R1120 when installed in SAILOR 19" rack or when installed in receiver cabinet H1225.

**Supply Voltage:**AC: 110/127/220/237 ± 10%, 50 - 60 Hz.
DC: 24V DC - 10% + 30%.

# **Typical Power Consumption:**

AC: 0.12 Amp. at 220V. DC: 1.5 Amp. at 26.4V.

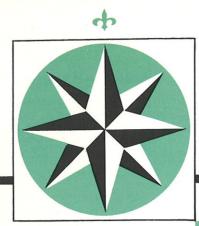
Dimensions: Height: 270 mm. Width: 205 mm. Depth: 75 mm. Weight: 3.8 kg.





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# Sailor Receiver programme 1000



Main Receiver R1120 10 kHz - 30 MHz SSB Telephony - Telegraphy - Telex



**Marine Communication** Receiver R1119 10 kHz - 30 MHz SSB Telephony



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

# **Marine Communication Receiver R1119**

SAILOR R1119 is a marine communication receiver developed using the most advanced techniques and complies with requirements such as UK MPT 1224 and CEPT.

SAILOR R1119 is designed for reception of the following: Single Side Band telephony.

Broadcast.

Signals for TELEX and FACSIMILE equipment.



# SailOr Receiver R1119 and R1120

# Introduction

SAILOR receivers R1119 and R1120 have been developed and produced in Europe's leading factory dealing in maritime radiotelephones. The factory having an annual output exceeding 20,000 sets.

Years of experience with communication receivers working under the harshest of environment has enabled S. P. RADIO to develop these receivers, which not only comply with the requirements of the authorities, but also the needs of the user in every respect.

SAILOR receivers R1119 and R1120 are units from the popular SAILOR short wave programme 1000.

# **Duplex** (Long Range Reception)

To ensure long range reception and good duplex performance, the receivers are provided with a specially designed front end with high order tunable RF filters, both of which give exceptionally good large signal capabilities and also offer the opportunity for matching into the aerial conditions prevailing on board ships. This front end system, combined with the large dynamic range of the receiver and other features, ensures noiseless reception in even the most difficult environment on board ships.

# Keyboard

The receivers R1119 and R1120 use a digital synthesizer, for frequency generation, which can be set to any receiving frequency in the range from 10 kHz to 30 MHz in 100

Both receivers are equipped with a keyboard for keying in the receiving frequency giving quick and safe operati-

If the required receiving frequency is unknown, manual search over the frequency band is possible.

The frequency selected is displayed on a six segment liquid crystal display (LCD).

# Simple Operation

The operation of the receivers is very simple. The high order RF filters are automatically selected, so that the only thing to be done when changing frequency is

# Select frequency - Tune aerial.

Continuous tuning is activated by pressing the decimal point key on the KEYBOARD.

The tuning wheel is disabled by pressing the zero key on the KEYBOARD.

# Installation

SAILOR receivers R1119 and R1120 are designed to fit into SAILOR 19" rack system, which is used in the SAILOR short wave programme 1000.

SAILOR receivers R1119 and R1120 also fit into the compact cabinet H1225 as shown in this brochure.

SAILOR receivers R1119 and R1120 are supplied from the AC/DC Power Supply N1405 which can be mounted hidden away.

# **Technical Data R1119**

Antenna Impedance:

Below 4 MHz: 50 ohm or 10 ohm/250 pF. Above 4 MHz: 50 ohm.

Frequency Range:

10 kHz - 30 MHz.

Frequency Stability: 0 - 40°C less than 25 Hz.

Clarifier:

Control range ± 150 Hz.

Mode of Operation:

A2 - A2H - A3 - A3A - A3H - A3J - F1 - 2.4F4.

SSB (A3J) -6 dB at +350 and +2700 Hz, -60 dB at -400 and +3700 Hz. AM (A3H) -6 dB at  $\pm$  2.7 kHz, -60 dB at  $\pm$  10 kHz.

Sensitivity 20 dB SN/N:

MF (A3J): less than 16 dB/1 uV MF (A3H): less than 30 dB/1 uV HF (A3J): less than 10 dB/1 uV HF (A3H): less than 24 dB/1 uV

**Automatic Gain Control:** 

SSB AGC with fast attack time and long hang time. Telex AGC with noise blanking characteristics.

**Audio Output:** 

5 Watt into 8 ohm. Line: 0 dBm into 600 ohm.

**Operation Temperature Range:** -15°C to +55°C.

# **Technical Data R1120**

Antenna Impedance: Below 4 MHz: 50 ohm or 10 ohm/250 pF. Above 4 MHz: 50 ohm.

Frequency Range: 10 kHz - 30 MHz.

Frequency Stability: 0 - 40°C less than 25 Hz.

Clarifier: Control variation ± 150 Hz.

BFO: Beat note variation -500 Hz to +150 Hz.

A1 - A2 - A2H - A3 - A3H - A3A - A3J - F1 - 2.4F4.

(A3J) -6 dB at 350 and 2700 Hz, -60 dB at -400 and +3700 Hz. (A3H) -6 dB at +2.7 kHz, -60 dB at +10 kHz. (A2) -6 dB at +1.1 kHz, -60 dB at ± 3 kHz. (A1) -6 dB at ± 0.6 kHz, -60 dB at ± 2 kHz. (A1) -6 dB at ± 0.15 kHz, -60 dB at ± 0.7 kHz. WIDE AM INTERMEDIATE VERY NARROW

Sensitivity 20 dB SN/N:

**Modes of Operation:** 

MF (A3J): less than 16 dB/1 uV. MF (A3H): less than 30 dB/1 uV. HF (A3J): less than 10 dB/1 uV. HF (A3H): less than 24 dB/1 uV.

**Automatic Gain Control:** 

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**Audio Output:** 

5 Watt into 8 ohm. Line: 0 dBm into 600 ohm.

Operation Temperature Range: -15°C to +55°C.

In position AUX a special TELEX FILTER or a LOWER SI-DE BAND FILTER can be supplied.



# Main Receiver R1120

SAILOR R1120 is a main receiver developed using the most advanced techniques and complies with IMCO's regulation for SAFETY OF LIFE AT SEA (SOLAS) and the most demanding requirements such as UK MPT 1201 and

SAILOR R1120 is designed for reception of the following: Single Side Band telephony.

Telegraphy.

Broadcast. Signals for TELEX and FACSIMILE equipment.