Sailor

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INSTRUKTIONSBOG FOR
SAILOR R 114

INSTRUCTION BOOK FOR
SAILOR R 114

INSTRUKTIONSBUCH FÜR
SAILOR R 114

INSTRUCTIONS POUR
SAILOR R 114

INSTRUCCIONES PARA
SAILOR R 114

A/S S. P. RADIO · AALBORG · DENMARK

A/S S. P. RADIO . HOBROVEJ . 9000 AALBORG . DENMARK

PRELIMINARY INSTRUCTION BOOK

FOR

SAILOR R114/M

A/S S. P. RADIO . HOBROVEJ . 9000 AALBORG . DENMARK

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SAILOR R114/M WATCHKEEPING RECEIVER FOR 2182 kHz

I Description of the SAILOR R114/M

The SAILOR R114/M is intended for constant monitoring of the 2182 kHz distress and calling frequency.

The SAILOR R114/M has a built-in detector system, which in the MUTE mode will switch the receiver to NORMAL, when receiving a two tone distress call and keep the receiver muted, when receiving normal speech and noise.

The SAILOR R114/M is designed to meet the requirements of both national and international authorities, including the MPT 1203 requirements.

The SAILOR R114/M has a built-in speaker. The volume from that speaker (and from the speaker of the SAILOR E199, if installed) is controlled by the VOLUME.

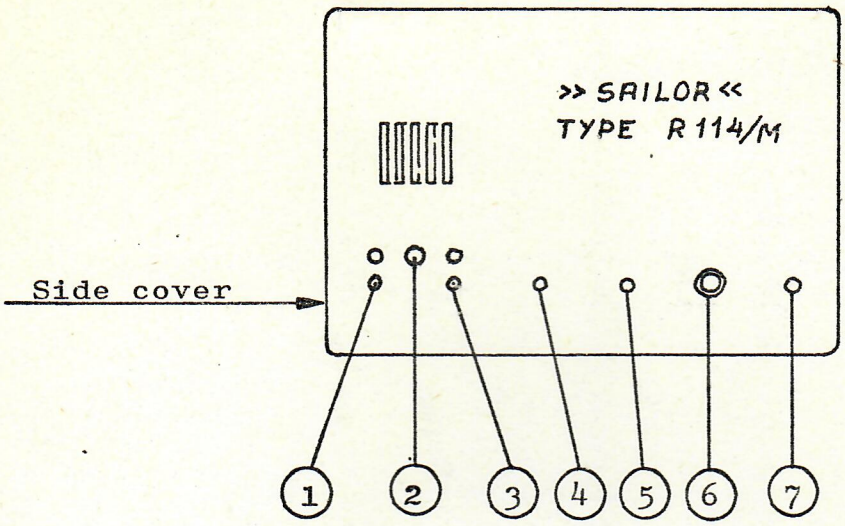
Volume cannot be turned fully down with the VOLUME, thus eliminating the risk of failing to hear an emergency call.

The SAILOR R114/M can be extended with a remote control unit SAILOR E199, from which the MUTE or the NORMAL mode can be chosen.

The SAILOR R114/M can be supplied in either 24V DC version or 24V DC - 110/220V AC version. The change-over switch is accessible from outside.

Other features include provision for muting during transmission with the transmitter of the vessel itself by means of an external 24V DC control voltage or an external contact function.

II CONTROLS



1) "MUTE": Push button for muting the loudspeaker when watch-keeping.

2) "DIMMER": Controls the lamp brightness.

3) "NORMAL": Push button for normal listening.

4) "RF-GAIN", preset control: Controls the RF amplification.

5) "AF-GAIN", preset control: Controls the AF amplification.

6) "VOLUME": Controls the volume from the built-in speaker. When turned fully anti-clockwise, the VOLUME turns off the supply voltage.

7) "AERIAL TUNE": Matches the aerial to the receiver.

III INSTALLATION

Aerial and Earth Lead:

For aerial use a 5-20 m long wire or whip aerial, minimum length 4 m, placed as high and as much in the clear as pos-

sible. For the lead-in from the aerial use a good quality coaxial cable, ET1OM or similar. It is important, that the lead-in is as short as possible, and that it is not laid near other electric cables.

The earth wire, insulated copper wire not less than 2.5 sq. mm. thick, should be connected to the hull (in iron vessels) or through a broad copper-band to the keel bolt or (in wooden vessels) to a metal plate not less than one sq.m. in size on the exterior of the hull below the water line. The earth wire should be as short as possible. A good earth connection is of decisive importance for low-noise reception.

All joints should be made by soldering.

The aerial and the earth wire are connected to the terminal strip on the side cover (the terminals are indicated by aerial and earth symbol).

Aerial tune:

When the receiver has been installed, the aerial must be tuned. This is done by means of the aerial trimmer placed behind the blind cover to the extreme right on the front panel of the receiver.

For tuning use the following procedure:

1. Set receiver in NORMAL mode.
2. Turn the aerial tune by means of an insulated trimming stick for max. volume of noise or signal.

Supply voltage:

Connect the mains 24V DC - 110/220V AC to the proper terminals on the side cover.

Set the voltage switch located on the side cover for the actual supply voltage. The R114/M 110/220V AC version is factory preset for 220V AC. Conversion to 110V AC requires a minor rewiring job inside the receiver. The schematic diagram

shows how to do this.

Extension loudspeaker:

A loudspeaker having 8 Ohms' impedance can be connected to terminals marked 1 and 2 in the REMOTE CONTROL terminal strip located on the side cover.

Remote control:

The SAILOR E199 remote control unit may be mounted a considerable distance apart from the SAILOR R114/M.

The receiver and the remote control unit must be interconnected through a six-conductor cable of not less than 0.25 sq.mm. conductor size. The numbers on the REMOTE CONTROL terminal strip located on the side cover corresponds with the numbers on the terminal strip inside the remote control unit.

Several SAILOR E199 may be connected to either the receiver or the remote control unit in the same manner as described above.

External muting:

Terminals 7 and 8 located on the side cover may be used for muting the receiver, when the transmitter of the vessel is in operation.

The receiver is muted, when 24V DC is supplied to the terminals 7 and 8.

A minor rewiring job inside the receiver makes it possible to mute the receiver, when terminals 7 and 8 are short circuited. The schematic diagram shows how to do this.

The receiver is factory wired for 24V DC operation.

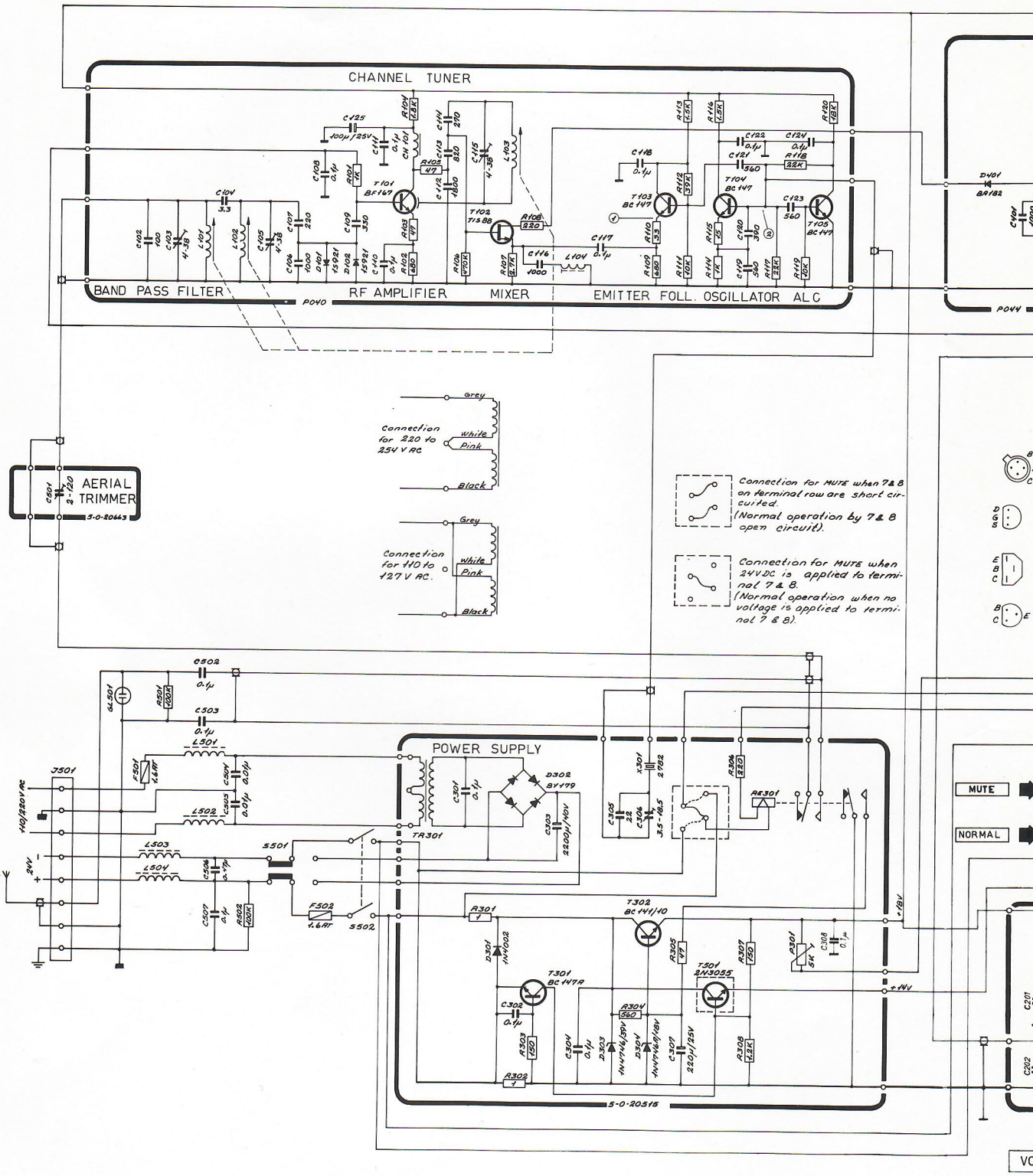
Setting the RF and AF preset controls:

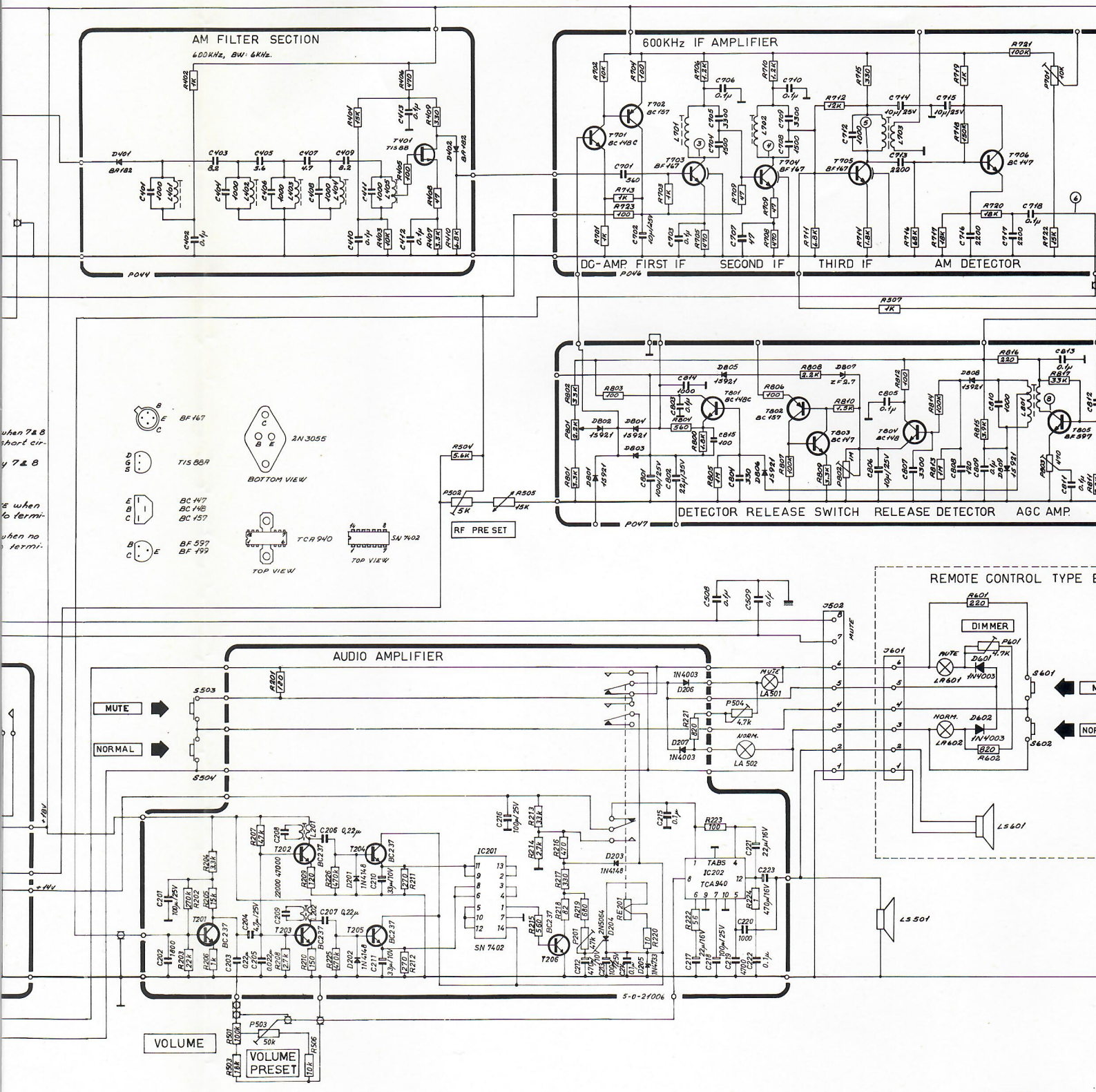
The RF and AF preset controls are located behind the blind covers at the front panel.

With the receiver in the NORMAL setting and the VOLUME fully anti-clockwise the AF preset control is adjusted to a suitable

volume level.

Under normal conditions the RF preset control shall be in the fully clockwise position. If there is too much electrical and atmospheric noise the RF gain may be decreased to the point, where the receiver noise, in the NORMAL setting, increases distinctly, when the aerial is connected. A simple method consists in short circuiting the aerial to earth and noting if the noise from the aerial exceeds the noise of the receiver itself, when the short circuit is removed. The adjustment should be made during daylight hours, preferably between 10 a.m. and 2 p.m., as atmospheric noise is then at its minimum.


CHANNEL TUNER
BAND PASS FILTER
RF AMPLIFIER
MIXER
EMITTER FOLL. OSCILLATOR ALC
POWER SUPPLY
AERIAL TRIMMER
5-0-20663
Connection for 220 to 254 V AC
Connection for 110 to 127 V AC.
Grey
White
Pink
Black
Connection for MUTE when 7 & 8 on terminal row are short circuited. (Normal operation by 7 & 8 open circuit).
Connection for MUTE when 24VDC is applied to terminal 7 & 8. (Normal operation when no voltage is applied to terminal 7 & 8).
MUTE
NORMAL
5-0-20515



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