

Accessory
Equipment
for
SAILOR R 108
AND R 109

Sailor

R 108 AM
R 109 AM/FM



Extension Loudspeaker
in plastic cabinet,
with mounting clamps,
cable, and plug.



Headphones
While direction finding
it can be advantageous
to use headphones
to exclude extraneous
noise. Low-impedance
phones are used as
these are more rugged
and moisture-resistant
than conventional
high-impedance
phones.

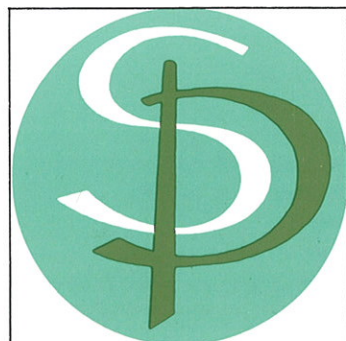


Ferrite Navigator BK171
For use in small plastic
or wooden craft.
This ferrite direction
finder is equipped with
a detachable 0.5-meter
sense aerial. This feature,
in conjunction with a
5-meter connecting cable
and provisions for connect-
ing headphones to the
Ferrite Navigator makes
operation outstandingly
simple. Insensitive to
heeling (sailing boats).
The fixed-mounted bear-
ing compass may also
be used for optical com-
pass direction finding.
The Ferrite Navigator
is not suitable for use in
metal vessels.

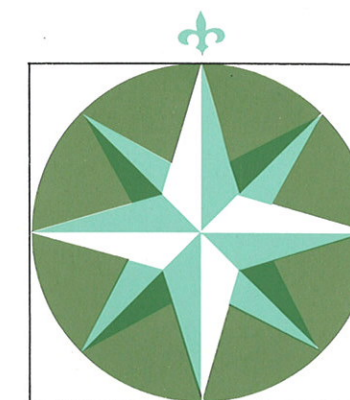


Transformer Box FB175
For use in larger
vessels in conjunction
with SAILOR Type 26F
or 26FA Direction-
Finding Loop.
The FB175 Transformer
Box has provision for
connection of sense aerial
and headphones.

DEALER:



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



Sailor

R 108 AM
R 109 AM/FM



MARINE RECEIVER

for communication and navigation

S. P. RADIO A/s · 9200 AALBORG SV



Sailor R 108

Sailor R 109



General Description

S.P. SAILOR R108 and R109 are in all respects the ideal radio receivers for coasters, small crafts, yachts and trawlers.

The only difference between SAILOR R108 and SAILOR R109 is the FM band, which is provided only in R109. SAILOR R108 and SAILOR R 109 may be used for broadcast, telephony and telegraphy reception and for Consol direction finding and DIRECTION FINDING ON ALL BANDS (except the FM band).

— expedient designed

S.P. SAILOR R108 and R109 are fully transistorised receivers designed specially for marine use for operation on a built-in battery or the lighting system of the vessel. All-welded, splashproof, anti-rust coated and RILSAN treated steel cabinet. All controls and mountings are of bright chromium-plated brass.

TECHNICAL INFORMATION

Built-in Loudspeaker

Built-in Battery Box
with six 1.5-volt IEC 20 standard dry cells — a type which is available all over the world.

Connections for wire aerial and FM aerial
(FM only in R109).

If no FM aerial is connected, the wire aerial is automatically utilised as FM aerial.

Direction-Finding Equipment
SAILOR BK171
SAILOR 26F-26FA

Loudspeaker and Headphone
8 ohms

Power Supply
from vessel, 12 - 24 - 32 volts.
Power consumption, 0.1 amp.

Height 230 mm
Width 340 mm
Depth 200 mm
Weight approx. 7 kg

Wave Bands

NW 250— 430 kHz
LW 150— 260 kHz
MW 495—1610 kHz
SW 1600—4500 kHz
FM 88—108 MHz

Sensitivity

LW better than $5\mu\text{V}$
NW better than $4\mu\text{V}$
MW better than $4\mu\text{V}$
SW better than $3\mu\text{V}$
FM better than $1\mu\text{V}$

AM Selectivity

± 4 kHz —6 dB
 ± 8 kHz —60 dB

FM Selectivity

± 120 kHz —3 dB

Image Rejection

LW > 90 dB NW > 80 dB
MW > 70 dB SW > 60 dB

AGC Characteristic

A 70 dB change in input voltage causes a 1 dB change in output voltage.

AM Intermediate Frequency
462 kHz

FM Intermediate Frequency
10.7 MHz

AF Characteristic

HIGH 1 kHz —6 dB
(bass-cut)
MED 4 kHz —6 dB
(treble-cut)
LOW 1.2 kHz —6 dB
(treble-cut)

FILTER 1 kHz $\pm$ 300 Hz

AF Output

Max. 1.6 watts at less than 5 % distortion.

Sailor R108 AM R109 AM/FM

BAND SWITCH. Selects between the following bands:
Reception on wire aerial and direction-finding aerial

5	NW	250— 430 kHz
	LW	150— 260 kHz
	MW	495—1610 kHz
	SW	1600—4500 kHz

6 TUNING CONTROL.

7 DIAL, 150 mm dial, calibrated in kHz. Resolution in direction-finding band is better than 1 kHz/mm.

R108: DIAL LIGHT SWITCH with two intensities:
NORMAL for use in partial darkness and DIM-MED for use in total darkness.

R109: BAND SELECTOR. Selects between AM and FM bands.

9 METER. Facilitates tuning and accurate determination of minimum during direction finding and sense indication.

10 BUILT-IN LOUDSPEAKER, 8 ohms, with large diaphragm and heavy magnet.

11 LOUDSPEAKER CONNECTION for external 8-ohms loudspeaker or headphone.

12 POWER CONNECTION. Male socket for connecting the receiver to the lighting system of the vessel (12 — 24 — 32 volts). Voltage switching is automatic.

13 DIRECTION-FINDING SOCKET for SAILOR BK171 Ferrite Navigator or SAILOR Direction-Finding Loop 26F—26FA (via FB175 Transformer Box).

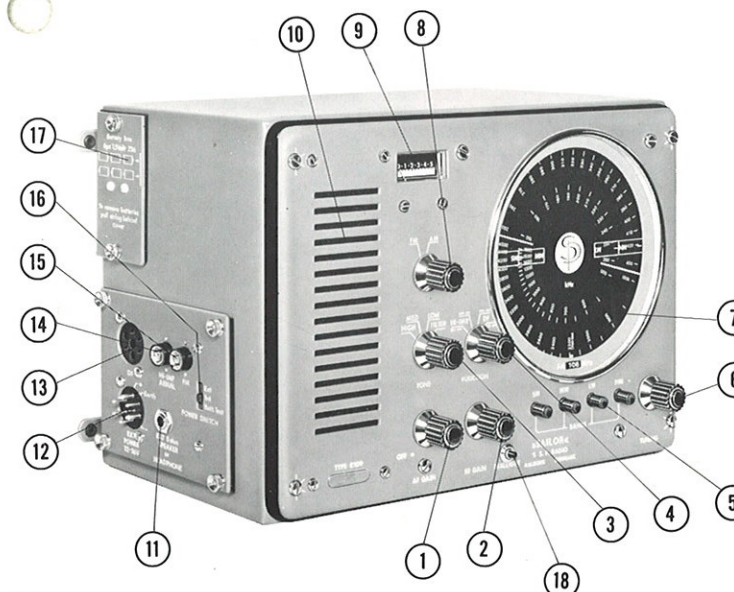
14 AERIAL SOCKET. For wire aerial.

15 AERIAL SOCKET. For FM aerial.

16 POWER SUPPLY SWITCH. Selects between external power supply (the lighting system of the vessel) and the built-in power supply (dry battery in receiver) and permits battery-voltage checking.

17 BATTERY BOX COVER. Instructions for battery replacement on cover.

18 DIAL-LIGHT push-button (only on R109).



CONTROLS AND CONNECTIONS

1 VOLUME CONTROL with on/off switch. Controls AF volume. The switch is operative regardless of whether the power supply switch is set for external or internal power supply.

2 SENSITIVITY CONTROL. Controls RF stage gain.

3 TONE SWITCH. Controls AF response
HIGH position clear
MED position medium
LOW position deep

The FILTER position limits the tone range to a band around 1000 Hz, minimising noise and adjacent-channel interference.

4 FUNCTION SWITCH. Selects between wire aerial and direction-finding aerial with BFO (beat-frequency oscillator) on in the BFO ON position and with BFO off in the BFO OFF position.

The AGC (automatic gain control) circuit is inoperative in the DF (direction finding) position.