

SAILOR RT5020 VHF DSC DUPLEX

Revolutionary full two-way communication at sea



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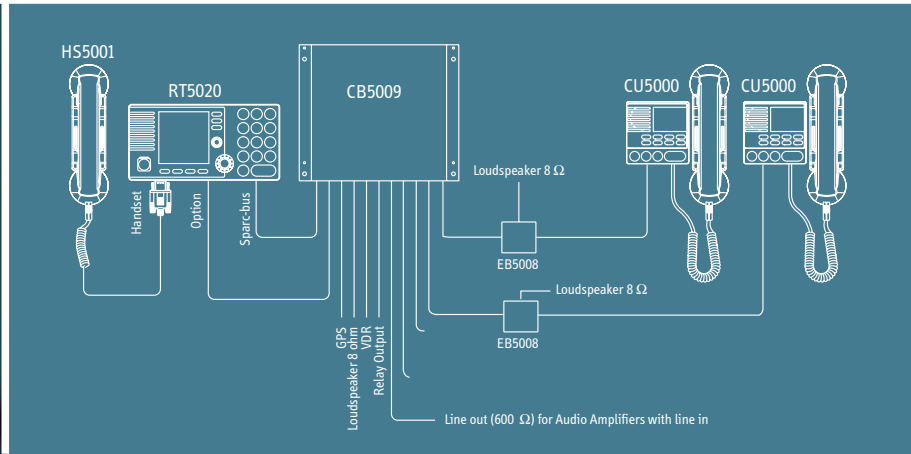
The SAILOR RT5020 VHF DSC Duplex is a state-of-the-art reliable communications tool for the professional mariner at sea. It is easy to operate and provides powerful and clear audio.

As a world first, the SAILOR RT5020 VHF DSC Duplex features the patented Replay function for improved communication and safety at sea. Push the replay button and the SAILOR RT5020 VHF DSC Duplex will replay the important messages that you may just have missed.

Features robust and compact design for flexible installation. Can be remote operated from i.e. bridge wings via the external waterproof CU5000 Control Unit.

Features

- Full duplex communication
- Replay function (Last 90 seconds of received data)
- 7-segment display for primary functions
- Graphical display with sleep mode for secondary functions
- All text and indicators in displays are red for improved night vision
- Display with Marine AR anti-reflection filter
- Efficient dimming of displays
- Powerful built-in 5W loudspeaker
- Ergonomic handset
- Easy to use, intuitive menus
- Scroll function
- Quick selection function
- Alarm mute button
- Large tactile buttons
- Tactile knobs for volume and squelch
- 25 to 1 watt switch button
- Built-in DSC Class A
- Dual watch
- Scanning
- Flexible installations with bracket and/or flush mounting
- Address book: 200 DSC addresses for vessels and coast stations
- Up to two semi-intelligent control units can be connected



Technical Specifications

Conforms to all relevant international requirements and resolutions as agreed by ETSI, IEC, ITU and IMO as well as other national requirements. These specifications include i.e. ETSI EN 301 925, ETSI EN 300 698-1, ETSI EN 300 338, ITU-R M.493-11, ETU-R M.541-9, IEC 61162-1 and IEC/EN 60945 (CU5000).

GENERAL

Channels	Channels	All international, US, Canadian and BI channels, covering most areas. Up to 30 private channels in 3 separate banks designated F, P or L. Each bank contains 10 private channels
Channel spacing		25 KHz / 12.5 KHz
Operation modes		Duplex / Simplex
Modulation		G3E/N for Telephony G2B for DSC
Frequency range		Rx/Tx: 150,800 – 157,425 MHz Rx: 160,625 – 163,600 MHz
Frequency stability		Better than ± 3 ppm
Aerial connectors		Standard 50 Ω female SO239
Temperature range		-15°C to +55°C
Supply voltage		12V to 24V DC nominal
Supply voltage range		10.8 - 31.2V DC

RECEIVER

Sensitivity for 20 dB		Better than -119 dBm
SINAD CCITT weighted		
AF rated Power Internal L.S.	5W	
Output for External L.S.	5W (8 Ω)	
Distortion		Less than 5%
S/N ratio		Better than 43 dB
Spurious emission		Less than 0.25 mW
Spurious response rejection		Better than 74 dB
Intermodulation response		Better than 73 dB
Co- channel rejection		Better than -10 dB
Adjacent channel selectivity		Better than 74 dB
Blocking level		Better than 94 dBμV
Duplex spurious response att.		Better than 74 dB
Duplex desensitization		Below 3 db

TRANSMITTER

RF output power	High: 25W +0 dB / -0.5 dB Low: 0.85W +0.5 dB / -1 dB
Adjacent channel power	Better than 75 dB
Conducted spurious emission	Better than 0.25 μW
Distortion	Better than 3%
S/N ratio	Better than 46 dB

DSC FACILITIES

DSC operation	According to Rec. ITU-R M.541-9 and Rec. ITU-R M.689-2
DSC protocol	According to Rec. ITU-R M.493-11 Class A
Navigator interface	According to IEC 61162-1 GLL, RMC, ZDA, GGA, VTG, GNS
Symbol error rate	Better than $1 \cdot 10^{-2}$ @ -121 dBm or 0.20 μV p.d.
Modulation	1700 Hz ± 400 Hz 1200 baud
Frequency error	Better than ± 1 Hz
Residual modulation	Better than -26 dB

DIMENSIONS

Transceiver dimensions	Height: 100 mm (3.94") Width: 200 mm (7.87") Depth: 210 mm (8.27")
Transceiver weight	4.9 Kg (10.8 lbs)

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