

### 5 WATTS HAND-HELD VHF TRANSCEIVERS

### **Navicom RT-300 VHF**

# New entry level handheld VHF transceiver Compact & user friendly

Designed for an easy use on leisure or professional boats, this new VHF transceiver meets perfectly the needs of users wanting to have a very simple device and not very expensive.

The RT-300 features nevertheless the most recent technology, and offers the same functions of more expensive one.

- RTTE Approved.
- IPX4 Watertight (spray resistant).
- Back lit LCD display.
- 56 channels with memorisation of the last selected channel.
- Selectable simplex & duplex modes.
- Output power: 0.8 W or 5 W.
- Adjustable squelch.
- Dual / Tri watch including channel 16.
- Transmit consumption: 0.9A or 1.8A.
- Receipt consumption: 50mA to 200mA (depending on the squelch control).
- Housing dimensions: 123 x 60 x 37 mm.
- With antenna mounted: 248 mm.
- Weight with batteries: 190g; without batteries: 290g.
- Antenna, hand strap and belt clip included.
- 1.5V AA batteries not included.

### **Navicom RT-311 VHF**

## Powerful, user friendly, spray resistant, with NiMH battery and charger

Marine functions: ship-to-ship and ship-to-shore communications, security messages that aren't assumed by GSM telephones and other cellular systems.

Internal CMOS processor compliant with new ETSI 300-162 european standard and electronimagnetical compatibility rules.

VCO frequencies synthetiser allowing to select any ITU channel without the adding of an expensive quartz.

Powered by integrated rechargeable battery (220 Vca charger provided) or by alcalin batteries in case of premature discharge.

- Watertight (IPX5).
- Selectable simplex & duplex modes.
- Output power: 1 or 5 W. Frequency range 156.025 to 163.275 MHz.
- 54 channels with memorisation of the last selected channel.
- All international channels. Optional private channels.
- Quick access to international channels.
  - 1 priority channel & 10 usual channels
    - storable.

      Dual / Tri watch including channel 16.
    - ATIS mode activation on demand.
    - Detachable waterproof antenna.
    - 21 hour battery life when in standby.
    - Battery load status indicator.
    - New NiMH technology whithout memory effect.
    - Dimensions (whithout antenna):
    - H 162 x L 60 x Ep 37 mm,
    - with antenna H 278 mm.
    - Weight with batteries 400 g.
       Includes the following in standard(1):

#### NiMH batteries.

- 220 Vca charger.
- Battery pack.
- Hand strap and belt clip.









Navicom Hand-held VHF Accessories (RT-300: none)





Models	Integrated Battery	12 Vcc cigar lighte charger	r Headset	Transparent watertight bag
VHF RT-311 (1)	RY-331c standard	RY-320 optional	RY-332 optional	RY-100 optional
VHF RT-320	RY-321 standard	yes	no	RY-100 optional
VHF RT-350	RY-370 standard	RY-371 optional	no	RY-100 optional





### 5 WATTS HAND-HELD VHF TRANSCEIVERS

### Navicom RT•320 VHF radio

# New up market VHF radio - Totally waterproof, compact & ultra light

The RT-320 VHF radio uses advanced technologies that make it one of the best existing mobile radios.

Light weight, compact &IPx7 waterproof, this reliable pocket VHF will follow you every where and remain operational in any environment. Its 1500 mA Li-ion battery offers extended battery life and shorter loading time.

Its powerfulloud speaker will be heard in the harshest conditions.

Basic features: Similar to RT•311 RT•320 specific features:

Ultra light VHF radio: 250 grams only.

Improved watertightness: IPx7.

NAVICOM

VINICOM

 Outstanding 1500 rnA U-ion battery. Offers one of the highest capacities on the market

 Fast charger in standard. 3.5 hour loading time instead of 8 hours for most other available product.

 ATIS number set from the VHF, without the need of a programmer.
 25 hour battery life in standby mode.

- Load status indicator.
- Dime sions without antenna:
   135x60x25mm. Weight: 250 g.



	R1-300	R1-311	K1-320
Consumption transmitting	1,8 or 0,9 W	1,9 or 0,9 A	1,9 or 0,9 A
Standby consumption	50 to 200mA	60 mA	60 mA
Sensibility	- than 0,25 mV	- than 0,3 mV	- than 0,3 mV
Squelch	8 niveaux	séquentiel	séquentiel
Dual/Tri watch including channel 16	Yes	Yes	Yes
External jack	Yes	Yes	Yes
Dimensions H x L x Pr (mm)	123 x 60 x 37	162 x 60 x 37	135 x 60 x 25
Weight with batteries	290 g	400 g	250 g
Energy	4 batteries	NiMH battery pack	Li-ion battery
Battery capacity	-	1300 mA	1600mA





### FIXED VHF DSC RADIOTELEPHONE



**RT-550**(1) **New fixed DSC VHF radiotelephone** with very large LCD display

The DSC system allows sending a distress signal, including an identification message on a 30 to 50 nm range, to all ships equipped with a DSC VHF (this equipment is compulsory on large ships, with permanent watch) All the useful information for rescue coordination, like ship identification & position are included in this message that is automatically transmitted from ship to ship until it is finally received by a rescue center.

Aside from this rescue function, the RT-550 DSC performs traditional communication functions with other ships

- Very large, red backlit display
- Ship to ship, or ship to shore calls
- Class D DSC included with message registration
- Channel & Output power selection from handset
- Backlit keyboard & display. Visual & audio alarms.
  Ship identification while a distress message is being sent
- Acknowledgement message sent by receiving stations
- DSC watch receptor. MMSI directory. 1 or 25 W output power.

Display	3 back lighting levels LCD Screen		
Keyboard backlit	Yes		
55 international channels	All authorized channels		
US channels	Yes		
Usual channel storage	10 channels		
Channel 16 quick access	Yes		
Squelch & volume knobs	Yes		
Power source	13.8Vcc		
Operating modes	Simplex / semi-duplex		
Antenna connector	Standard female 50 Ohms SO-239		
Operating temperature	-15°C to +55°C		
Dimensions and weight	167x157x72 mm, 1.2Kg		
Output power	1 or 25 W		
Distortion ; Signal/Noise rate	<5%; <40dB		
Sensitivity / Reception distortion	12dB / <5%		
Internal speaker & external plug	4 W / 8 Ohms (external speaker in option)		
DSC functions			
MMSI directory	20 numbers stored		
Distress & security calls	Individual & to all ships		
Routine calls	Group calls		

With a DSC VHF transceiver, one push on the distress button ensure, in automatic mode, a repeated transmission of rescue calls on channel 70, fully dedicated to this use. The messages

include the ship's ID, its position, the hour of the initial call, and the nature of the distress (user selected from list during call activation). If a merchant ship is in transmission range, these signals are automatically retransmitted to other stations by any onboard available means of communication (VHF, SSB or satellite phone), and an acknowledgement message is added to the initial message. These relays operate until final reception by a marine rescue centre.

> DSC signal transmitted by distressed ship on channel 70 along with ship's ID, name, position, type of distress and VHF channel number for communication with rescue services.

2 Automatic retransmission of DSC signal by nearby ship

DSC Call

Transmission

3 Signal reception and message processing by marine rescue centre

4 Acknowledgement message sent to distresses ship by rescue centre



When purchasing a VHF transceiver. user must conform to the ongoing regulation:

1/ Restricted radiotelephony certificate

2/ License application 3/MMSI number application

The responsible authority in France for this of procedure is the ANFR (www.anfr.fr).



DSC VHF RT-550 can be gimbal or flush mounted





### FIXED VHF DSC & AIS RADIOTELEPHONE



New fixed all-in-one VHF featuring radiotelephone functions, DSC and AIS systems with a very large LCD display and a wireless handset

Other features: the large LCD display readable by far, a wireless handset with

LCD display and all the command buttons working over 200 m from the VHF.



Only one antenna for the CHF transmission and the AIS system.

devices. With this VHF you save money and space onboard.

- AIS signal receipt on the VHF is available on the NMEA output to be displayed on a PC or a chartplotter: positioning of the nearby ships and set of information: MMSI, name, characteristics, route, speed, etc...
  - Intercom function providing a private communication network onboard as far as 200 m from the board.
    - Protection against interferences.

## Automatic Identification System principle of operation

AIS transponders automatically broadcast information, such as their position, speed, and navigational status, at regular intervals via a VHF transmitter built into the transponder. The information originates from the ship's navigational sensors, typically its global navigation satellite system (GNSS) receiver and gyrocompass.

Other information, such as the vessel name and VHF call sign, is programmed when installing the equipment and is also transmitted regularly. The signals are received by AIS transponders fitted on other ships or on land based systems, such as VTS systems.

### Base specifications

Same as the RT-550 VHF with AIS function.

- Built-in AIS.
- Frequency range 161.975 / 162.025MHz.
- GPS input. NMEA output.

#### AIS: enhanced security

The AIS information is an important security element at sea with bad visibility or when something limits the detection of a ship in collision situation.

(1) RT-550 & RT-650 : noncontractual photographs and features likely to be modified without notice.





### Fixed VHF DSC, AIS & MOB Radiotelephone



# **MOB Watch**

The RT-650 MOB is the same as the RT-650 DSC with the MOB watch. When the signal of a MOB unit is lost, the radio turn on the external loudspeaker with alert tone for warning. If a crew member fall into the water, or if he/she push the alert button on the MOB unit, the alert tone begins on the VHF radio.

### **MOB Unit**

- Watertight
- Manual activation
- Automatic activation
- Low batterie signal











