Manufacturer:

Simrad Navico
Star Lane, Margate
Kent CT9 4NP
United Kingdom
Telephone: +44 (0) 1843 290290
Telefax: +44 (0) 1843 290471
E-Mail: productsupportmargate@simrad.com

WORLDWIDE MANUFACTURER OF MARINE ELECTRONICS

SIMRAD
A KONGSBERG Company

Manual

Simrad RT62 / RT64
Fixed VHF Radio

SIMRAD
A KONGSBERG Company

CONTENTS

1 GENERAL

1.1 Introduction

The RT62 and RT64 fixed VHF radios are designed by Simrad and manufactured at our modern factory facility in the UK. The radio is designed to meet or exceed stringent International Regulations including ETS300-162 and EN301-025.

The RT62 and RT64 are robustly constructed using a pressure die cast aluminium case for effective heat dissipation, ensuring maximum transmission performance even after many hours constant use.

Please note that VHF regulations vary from country to country. Simrad sets are approved specifically by the countries in which they are sold and consequently there may be differences in the programming of sets bought in different countries. If using outside the country of purchase, it is vital to check that the set conforms to local regulations before use.

Thank you for choosing Simrad

If you are pleased with your VHF we hope you will be interested in our range of marine electronic equipment, which is manufactured to the same high standards as the RT62/64. Please contact your nearest Simrad Agent for a catalogue showing our increasing range of high tech navigational instruments, GPS, autopilots, Radar, Fishfinders and VHF radio sets.

Simrad operate a policy of continual development and reserve the right to alter and improve the specification of their products without notice.

Fig 1.1 - RT62 & RT64 Waterproof Fixed VHF

4.5 Service & Warranty

Your radio should seldom need servicing, although it will benefit from an application of silicone or Teflon grease to the antenna and mic sockets each season. If it is necessary to have the unit repaired, the warranty card supplied with the unit should have been filled in and sent to Simrad when the unit was purchased. Please refer to the Warranty Card booklet for more details.

The unit is guaranteed for 12 months from date of retail sale. If it is necessary to have the unit repaired, return it carriage prepaid to the agent in the country of purchase with a copy of the receipted invoice showing the date of purchase. Where possible, return all the components unless you are certain that you have located the source of the fault. If the original box is not available, ensure that it is well cushioned in packing; the rigours of freight handling can be very different from the loads encountered in the marine environment for which the unit is designed.

For Worldwide Warranty details, please refer to the Warranty Card supplied with this unit.

A list of official worldwide Simrad dealers is included in the Warranty Card.

1.2 RT62 and RT64

Both the RT62 and RT64 are available with either a fistmike or telephone handset, and offer the same features. The details in this owner's manual apply to both models.

The RT64 features a second watchkeeping receiver, allowing it to use the Digital Selective Calling (DSC) system on VHF channel 70. For this the RT64 will need to be linked to the Simrad Class D DSC control unit DSC1400.

NOTE

The RT62 is only available for applications that do not require DSC functions.

This manual describes all operating features available to the RT62 and RT64, including channel scan which is not permitted in certain countries. Therefore this feature may not be available on the set supplied if it was purchased or configured for one of these countries.

1.3 Licensing

NOTE

Prior to use check the national licensing requirements for the operator.

In the UK license applications and queries should be made to -

Ship Radio Licensing
Radio Licensing Centre
The Post Office
PO Box 1495
Bristol
BS99 3QS

A set may only be operated by, or under the supervision of a holder of a Certificate of Competence and Authority to Operate. This involves a simple examination and an annual license renewal fee. For details contact -

Royal Yachting Association
RYA House
Romsey Road
Eastleigh
Hants, SO5 4YA

Holders of the Restricted Certificate of Competence in Radiotelephony (which covers MF/HF SSB etc), do not need a separate VHF certificate.

In all other countries, please contact your regional authority for information.

2 OPERATION

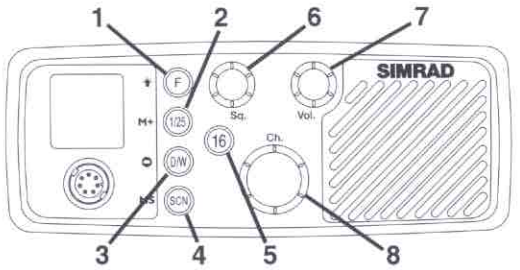
2.1 Location of Controls

The RT62 and RT64 VHFs are very simple to operate, using only five buttons and three rotary knobs to access a variety of functions. The functions available will depend on whether the radio is a scanning or non-scanning version (scanning functions are not permitted in certain countries).

Control	Legend	Primary function	Secondary function
1	F/☼	Used to access secondary functions*	Switch backlighting on/off
2	1/25	Select transmit power (1w / 25w)	Enter selected channel into memory*
3	D/W	Dual Watch	Inhibit channel from scan*
4	SCN/P	Scan all channels* / Select working channel†	Scan channels in memory sequentially*
5	16	Select channel 16	
6	Sq	Squelch adjust	
7	Vol	On–off / Volume adjust	
8	Ch	Channel select knob	

* Scanning versions only † Non-scanning versions only

Scanning version



Non-scanning version

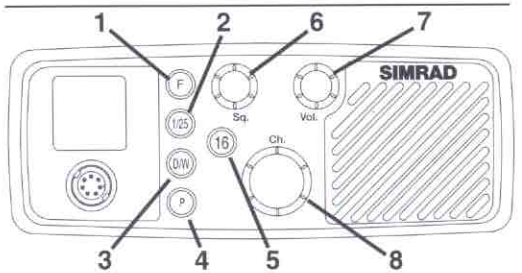
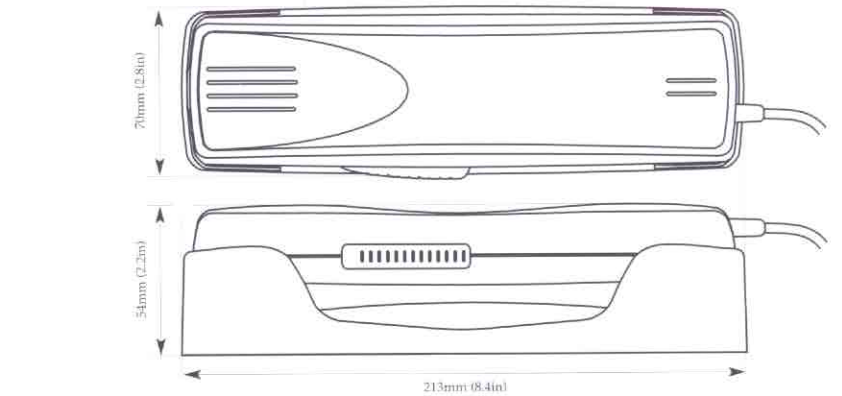
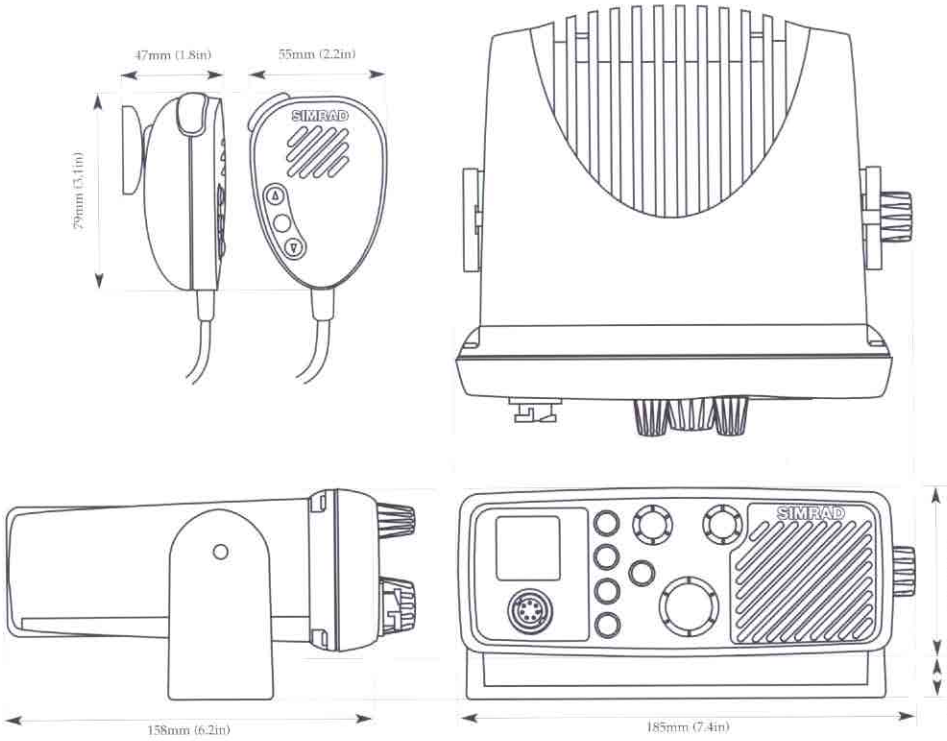


Fig 2.1 - Control functions

4.6 Dimensions





4.5 Technical Specification

Power Supply	12v DC (10.8v - 15.5v DC)
Channel Capability	55 international channels 1-28, 60-88 simplex & semi-duplex UK : includes M (previously 37) and M2 USA : includes 0, 29, 89, 75, 76, Wx1-10 receive only. Scandinavia : leisure or fishing channels as appropriate. Canada : Canadian and USA channels.
Private Channels	Up to 16 private channels*
External Speaker Impedance	8Ω

Transmit -

Frequency Range	155-163Mhz
Power Output	1 watt or 25 watts
Current Consumption	5.5A (25 watts) 1.3A (1 watt)
Harmonic and Spurious Emissions	< 0.25µW
Hum / Noise	< -40dB
Modulation	±5kHz

Receive

Audio Output Power	2 watts
Current Consumption	340mA (Full Volume, illumination on) 190mA (Fully Squelched, illumination off)
Sensitivity	< 0.5µV emf for 20 dB SINAD
Harmonic and Spurious Emissions	< -2nW
Hum / Noise	< -40dB
Adjacent Channel Selectivity	70dB
Intermodulation Rejection	70dB

* Contact local Simrad Technical Dealer for further details of channel programming etc.

Environmental

VHF Radio	Waterproof to IP66
Fistmike / Telephone Handset	Waterproof to IP67
Compass Safe Distance	1m (3.3ft)

2.2 Operation - Scanning Versions

The radio is switched on using the volume knob. The VHF starts up automatically on channel 16* at maximum power (25w). **This can be changed - contact Simrad Agent for details*

2.2.1 Function (F) / Backlight (☼)

NOTE - Secondary functions are only available on scanning versions of the VHF.

Several of the keys have secondary functions in addition to the main function. These are accessed by pressing **F**, then the appropriate key within two seconds (do not hold the **F** key down). When **F** is pressed, the F legend will appear on the LCD for the two seconds it is active. Pressing another key within this time will access its second function.

Backlighting

The LCD backlighting is switched on and off as a secondary function of the **F** key. To turn the backlighting on/off press **F** twice (Fig 2.2). If the **F** key is held down the second press, the lighting will step through five brightness levels. Release the key when the desired lighting level is reached.

Fig 2.2 - Switching backlighting on

2.2.2 Power (1/25) / Channel Memory (M+)

Although the radio has a maximum transmit power of 25 watts, this is not always necessary if communicating with a station or vessel that is very close. To reduce power consumption, the transmit power can be reduced to 1 watt. This key operates as a toggle, switching between 1w and 25w (Fig 2.3).

NOTE - Some channels are restricted to 1w transmit power. The radio is programmed to switch to low power automatically when one of these channels is selected

Fig 2.3 - Selecting transmission power (1/25W)

Channel Memory function

This will add the currently selected channel into the Scan Memory. Press **F** then **1/25** - the LCD display will show ENT indicating that the channel has been entered into the Scan Memory. Pressing **F** then **1/25** if the channel is already in the memory will remove it - indicated by DEL appearing on the bottom line of the LCD display.

4.4 Fault Finding

Symptom	Possible Cause	Remedy
Unit will not switch on	• Faulty connection to power • Fuse has blown	• Check power connection • Replace fuse and check power supply current
Scan or Memory Scan is locking on a channel without a signal	• Noise on the channel is holding the scan	• Increase squelch level • Inhibit channel from scan (see section 2.2.3)
Dual Watch not being entered	• Priority channel selected • Handset off cradle	• Select a working channel • Replace handset
Cannot change channel	• Dual Watch (D/W) engaged	• Exit Dual Watch
Certain channel numbers are not obtainable	• Some channels are restricted and not programmed depending on country of purchase	• Consult your national authority for permitted channels in your region
Will not transmit	• Scanning or D/W function active	• Exit D/W or Scan
Will not transmit on 25W but OK on 1W	• Low voltage when full transmitting current is drawn • Some channels are restricted to low power transmission only	• Check power supply • Consult your national authority
Transmissions persistently weak / display flashes 'ANT'	• Damaged antenna • Antenna cable broken • Poor contact	• Replace antenna • Replace cable • Check antenna sockets & through deck connector

These simple checks should be carried out before seeking technical assistance and may save time and expense. Before contacting your servicing agent please obtain the radio's serial number. The software iteration should also be quoted - this is shown in the large digits on the display for 2 seconds after the radio is turned on and should be written in the box below for future reference -

RADIO SERIAL No.	SOFTWARE ITERATION

4.3 Frequency of Channels

Channel Desig-nators	Tx	INT Rx	USA Rx
0	156.000	156.000	156.000
60	156.025	160.625	156.025
01	156.050	160.650	156.050
61	156.075	160.675	156.075
02	156.100	160.700	156.100
62	156.125	160.725	156.125
03	156.150	160.750	156.150
63	156.175	160.775	156.175
04	156.200	160.800	156.200
64	156.225	160.825	156.225
05	156.250	160.850	156.250
65	156.275	160.875	156.275
06	156.300	156.300	156.300
66	156.325	160.925	156.325
07	156.350	160.950	156.350
67	156.375	156.375	156.375
08	156.400	156.400	156.400
68	156.425	156.425	156.425
09	156.450	156.450	156.450
69	156.475	156.475	156.475
10	156.500	156.500	156.500
70	156.525	156.525	156.525
11	156.550	156.550	156.550
71	156.575	156.575	156.575
12	156.600	156.600	156.600
72	156.625	156.625	156.625
13	156.650	156.650	156.650
73	156.675	156.675	156.675
14	156.700	156.700	156.700
74	156.725	156.725	156.725
15	156.750	156.750	156.750
75	-	156.775	156.775
16	156.800	156.800	156.800
76	-	156.825	156.825

Channel Desig-nators	Tx	INT Rx	USA Rx
17	156.850	156.850	156.850
77	156.875	156.875	156.875
18	156.900	161.500	156.900
78	156.925	161.525	156.925
19	156.950	161.550	156.950
79	156.975	161.575	156.975
20	157.000	161.600	161.600
80	157.025	161.625	157.025
21	157.050	161.650	157.050
81	157.075	161.675	157.075
22	157.100	161.700	157.100
82	157.125	161.725	157.125
23	157.150	161.750	157.150
83	157.175	161.775	157.175
24	157.200	161.800	161.800
84	157.225	161.825	161.825
25	157.250	161.850	161.850
85	157.275	161.875	161.875
26	157.300	161.900	161.900
86	157.325	161.925	161.925
27	157.350	161.950	161.950
87	157.375	157.375	157.375
28	157.400	162.000	162.000
88	157.425	157.425	157.425
29	-	-	157.450
89	-	-	157.475
WX01	-	-	162.550
WX02	-	-	162.400
WX03	-	-	162.475
WX04	-	-	162.425
WX05	-	-	162.450
WX06	-	-	162.500
WX07	-	-	162.525
WX08	-	-	161.650
WX09	-	-	161.775
WX10	-	-	163.275

The following channels may be fitted to your radio. These are only licensed for use in the countries indicated. No attempt should be made to use them in any other country.

Designation	Tx	Rx	Country
M	157.850	157.850	UK
M2	161.425	161.425	UK
31	157.550	161.150	Holland/Belgium
96	162.425	162.425	Belgium
L1/1L	155.500	155.500	Scandinavia
L2/2L	155.525	155.525	Scandinavia
L3/3L	155.650	155.650	Scandinavia (not Denmark)
F1/1F	155.625	155.625	Scandinavia
F2/2F	155.775	155.775	Scandinavia
F3/3F	155.825	155.825	Scandinavia

Channel 0 will only be made available in the UK to Coastguard users with written authorisation.

Channels M and M2 are UK marina channels and will not be programmed on non-UK radios.

Channel 70 is the designated Digital Selected Calling (DSC) channel and can only be used by an RT64 + DSC1400.

2.2.3 Dual Watch (D/W) / Channel Inhibit (⊖) + Revert function

Dual Watch enables the radio to scan between the selected channel and the priority channel (normally Ch16). To activate Dual Watch Mode, select the channel and press **D/W** - the D/W legend will be displayed on the LCD.

NOTE

The channel cannot be changed and transmission is inhibited while in Dual Watch mode. To restore normal operation, either press **D/W**, **16** or rotate the channel select knob anticlockwise.

Inhibit Function

Since the Scan function locks onto channels where a signal is detected, it will lock onto a channel with a lot of interference noise, or transmitting a continuous carrier wave signal, preventing the radio from continuing the scan. The Inhibit function allows channels to be removed from the Scan sweep. Pressing **F** then **D/W (⊖)** will inhibit the selected channel - indicated by INH appearing on the bottom line of the display (Fig 2.4). Pressing **F** then **D/W (⊖)** if the channel is already in inhibited will restore it to the Scan - indicated by ENA appearing on the bottom line of the display.

Fig 2.4 - Inhibiting channel from Scan

REVERT Function

If **D/W** is pressed when CH16 is selected, the VHF will revert to the previously selected channel.

2.2.4 Triwatch

The Triwatch function is similar to Dual Watch, but this scans between the selected working channel, the User channel and the Priority channel. To set the User channel, refer to section 2.2.10 .

To enter Triwatch mode, press and hold the **D/W** key for 2 seconds. The "D/W" legend and "tRI"will be displayed on the LCD. To exit Triwatch, press the **D/W** key or turn the channel selector anti clockwise.

2.2.5 Scan (SCN) / Memory Scan (MS)

This function scans through each channel sequentially until a signal is detected above the squelch level set. Once the signal ends or drops below the squelch level, the radio will continue scanning. Press **SCN** to enter scan mode. The LCD will show SCAN (Fig 2.5).

Fig 2.5 - Entering Scan mode

NOTE

The channel cannot be changed and transmission is inhibited while in Scan mode. To restore normal operation, either press **SCN**, **16** or rotate the channel select knob anticlockwise. If the scan has stopped on a busy channel, rotating the channel selector clockwise will move the scan sweep on to the next channel.

Memory Scan (F then SCN)

This operates in the same way as the Scan function, except that it will only scan channels that have been entered into the Scan Memory. If no channels have been entered into the memory then this function will not be available (refer to section 2.2.2).

4.2 Transmission Range

Because VHF signals travel in a straight line and are not reflected back off the ionosphere as lower frequency signals are, the range of VHF signals is limited to 'line of sight', beyond which the other vessel passes behind the curve of the Earth. Therefore, the range will increase greatly the higher above sea level the antenna is, as Fig 5.1 illustrates (assuming maximum transmission power is used):

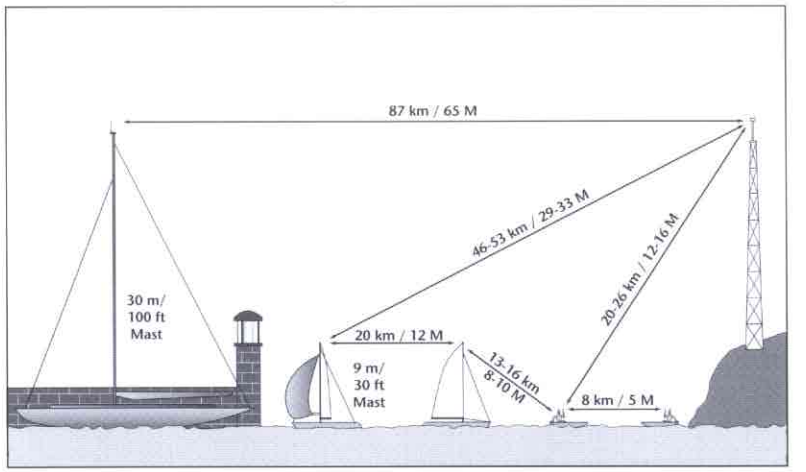


Fig 4.1 - VHF transmission range

Therefore, the typical ship to ship range of a fixed VHF radio such as the RT62/RT64 with a masthead antenna will be approximately 20 Km (12 miles). This will increase as height above sea level increases, or if the other radio user's antenna is at a greater height - note that the range between the yacht with the antenna mounted on a 9 M (30 Ft) mast and the shore station increases to 46-53 Km (29-33 Miles).

4 APPENDIX

4.1 Optional Accessories

The following accessories are available from your nearest Simrad Technical Dealer. Please quote the correct part number when ordering.

DSC1400
DSC Controller (Class D)
for use with RT64

THS-5
Spare telephone handset

FTM-5
Spare fistmike

LS60
Waterproof extension loudspeaker

FMB1000BK Flush Mount Kit
Suitable for RT62, RT64 and DSC1400

2.2.6 Channel 16 (16)

Will automatically select Channel 16 on High Power when pressed. Any function active (Dual Watch, Scanning etc) will be cancelled.

2.2.7 Squelch (Sq)

This knob is used to adjust the receiver muting threshold (squelch) level. To cut out weaker signals, increase the squelch until the background interference noise disappears. To receive weaker signals, decrease the squelch.

2.2.8 Volume, On/Off (Vol)

The radio is switched on by turning the volume knob clockwise. To increase the volume, turn the knob further clockwise. To reduce the volume, turn the knob anticlockwise. Turn the knob fully anticlockwise to switch off.

2.2.9 Channel Select (Ch)

The VHF features a rotary channel selector. Rotate the knob clockwise to scroll up through the available channels, anticlockwise to scroll down (Fig 2.6).

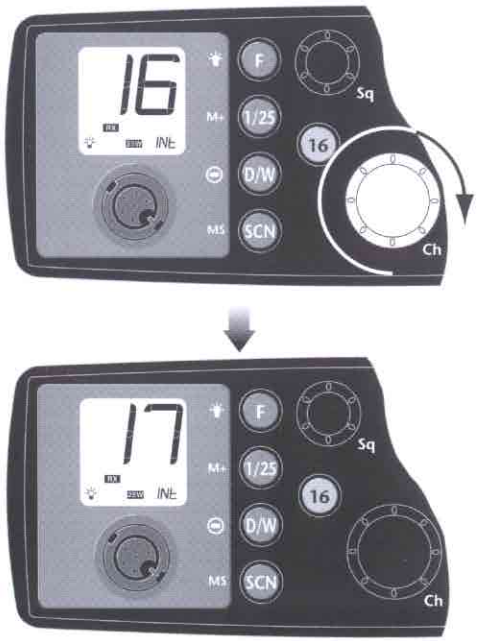


Fig 2.6 - Changing channels

2.2.10 User Channel (F then 16)

This function allows a user selectable personal channel to be programmed. Select the channel, press **F** then press and hold **16**. Initially the display will show the previously selected user channel, but after 2 seconds the new user channel will be shown and USE will appear on the bottom line of the display - the button may now be released.

This channel can now be accessed by pressing **F** then **16**.

2.3 Operation - Non-scanning Versions

In countries where scanning radios are not permitted, the secondary functions listed are not available (Fig 2.7).
The primary functions are the same with these exceptions -

Fig 2.7 - Controls – non-scanning versions

2.3.1 Backlight (☼)

On non-scanning versions of the radio the **F** key is replaced with a backlighting key ☼. Turning the backlighting on and off requires only a single press of the ☼ key. Press and hold the key when switching the backlight on to step through the five lighting levels and release when the desired lighting level is reached.

2.3.2 User Channel (P)

This function allows a user selectable personal channel to be programmed. Select the channel, then press and hold **P**. Initially the display will show the previously selected channel, but after 2 seconds the display will show the new channel and USE will appear on the bottom line of the display - the button may now be released. The User channel can now be directly accessed by pressing **P**.

agent should be able to provide specific advice on antenna choice for the vessel it is to be fitted to.

The antenna coaxial cable and any connectors used must be rated at 50Ω. Under no circumstances should standard domestic TV cable and connectors be used. Incorrectly rated cabling and connectors could result in power not reaching the antenna, but also power could be reflected back into the radio, damaging it in the process.
The quality of any connections and integrity of the cable (i.e no breaks in the sheathing) will directly affect the performance of the radio. Poor soldering or corrosion of the terminals can impair performance. It is recommended that screw or crimp terminal type connectors are not used for any through deck fittings - a good quality waterproof solder terminal connector will be less susceptible to poor connection due to corrosion of the contacts.

3.4 Electrical Interference Suppression

Interference generated by the alternator of the engine may occasionally cause problems. The radio has been designed to minimise the effects of outside interference. However, precautions should still be taken - route the power supply and antenna cables away from the engine compartment. The cable run should not be down the same trunking as other cables carrying high current. The antenna cable should also be kept seperate from the radio's power cable.

Engines with spark ignition - and also some refrigerators - should be fitted with suppressors. Your local agent should be able to give advice on this, and also supply suppression kits where necessary.

storage or security, so leave an adequate length of cable to ease disconnection. The flying lead from the rear of the radio can then be plugged into the power supply lead. Note that the configuration of the plug prevents incorrect connection.

The antenna is connected to the radio using a standard PL259 type connector as fitted to most marine antennae. If fitting to an existing antenna, check that the contacts are not corroded before connecting, as this will affect the quality of the signal. Ensure that the retaining collar of the antenna plug is securely tightened to prevent accidental disconnection.

The extension speaker socket takes a standard 3.5mm jack plug. The speaker used must have a minimum impedance of 8Ω.

3.3 Antenna Installation Recommendations

The most important factor in the performance of the radio will be the quality and positioning of the antenna. Most recorded problems with VHF radios are related to poor antenna siting, faulty cabling, poor quality cable joints and low voltage supply. Even a VHF as highly advanced as the RT62/RT64 cannot compensate for these factors. Therefore, if replacing an existing VHF installation, it is important that these factors are checked when installing the radio.

As the range of VHF signals are governed by line of sight (see section 4.2), the antenna should be placed as high as possible, while remaining clear of any metallic objects that could influence the resonance of the antenna.

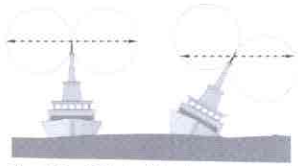


Fig 3.5 - Effect of heel on range of 1m marine antenna

The most popular antennae for marine use are 1m (3ft 3in) long. On sail boats these are usually mounted on the masthead, where the length of the antenna keeps it clear from the navigation lights and windvanes etc. This type of antenna can also be mounted on the cockpit roof or garage of power boats.

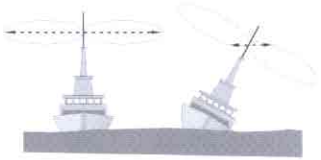


Fig 3.6 - Effect of heel on range of longer whip antenna

Longer whip antennae are recommended for larger boats. These radiate the same total power as smaller antennae, but concentrate it into a narrower beam, which is advantageous on a tall mast at extreme range where concentrating the available power into a narrow horizontal beam becomes more important. However, if the antenna is not vertical when transmitting, the beam will be angled either too high or too low (Fig 3.6). Here the wider beam of the shorter antenna will be more universally effective, although the signal will be weaker (Fig 3.5). Therefore vessels with a large heel angle (small sailboats) would be better choosing a short masthead antenna. Your local

2.4 Memory Mode

This function is only available on scanning versions of the VHF. It allows the radio to operate using only the channels programmed into the channel memory.
Press **F** then press **SCN**, holding down for 2 seconds. Rotating the channel select knob will then only select the channels programmed into the memory. To disable this mode and return to normal operation, either switch the radio off and on again, or press 16.

This mode will only be available if there are channels programmed into the memory (see section 2.2.2).

2.5 Second Channel Mode

In countries where it is permitted, holding **F**/☼ down while turning the radio on will enable the radio to operate on a secondary set of channels - normally the USA channels (Fig 2.8).

Fig 2.8 - Selecting secondary channel set

The display will show USA for USA channels, CAN for Canadian channels etc. Channel sets available will vary depending on which country the radio is programmed for use

in. Please enquire with your national licensing authority for details of permitted channel sets.

The radio will revert to normal operation if it is switched off then on again.

2.6 Speaker Mute

On models fitted with a telephone handset, lifting the handset from the cradle will normally mute the front panel loudspeaker automatically.

If required, this function can be disabled by holding down **D/W** while turning the radio on (Fig 2.9). The loudspeaker will subsequently remain on when the handset is lifted.

As this setting is stored in the radio's non-volatile memory it will be remembered even if the radio is totally disconnected from the power. To restore speaker muting, hold down **D/W** again while turning the power on.

Fig 2.9 - Disabling speaker mute (handset versions only)

3.2 Electrical Installation

The RT62/64 has four electrical connections - the handset/fistmike socket is on the front panel below the LCD display (Fig 3.4A). The other three are situated on the back of the case - the antenna socket is on the right (Fig 3.4B), a 3.5mm jack socket for an optional extension speaker on the left (Fig 3.4C), below which is the DC power input via a two core flying lead (Fig 3.4D). An earth stud (Fig 3.4E) is provided to earth the case.

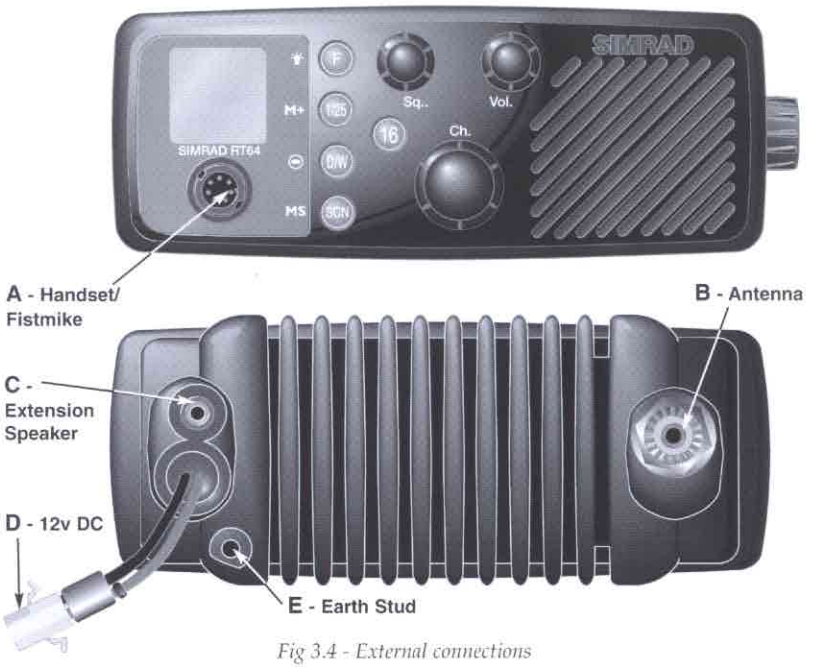


Fig 3.4 - External connections

The radio requires a 12v DC supply, and is supplied with a power lead which incorporates an in-line 7.5 amp fuse. This lead should be connected to the vessel's power supply, keeping the cable runs as short as possible. Although the radio draws little current when receiving, a heavier current is drawn when transmitting which may result in a voltage drop if very long cable runs are used of inadequate core diameter. If the supplied power lead is not long enough, an extension of up to 3m (10 ft) can be made using at least 2.5mm2 (13AWG) wire.

The red wire is positive and black is negative. If polarity is accidentally reversed, the set is protected but the fuse will blow. Ensure that it is replaced with a fuse of the correct 7.5 amp rating. The radio is designed to be easily removable for

The radio is fixed to the bracket using a simple clamp arrangement. The peg on the left side of the radio is slotted into the hole in the bracket. The clamp on the right side of the radio can then be slid into the slotted aperture on the bracket and tightened to hold the radio firmly in place (Fig 3.3). The rake angle of the radio can be adjusted by slackening the clamp.

1. *Fit locating peg (left side) into hole in bracket*
2. *Slide locking clamp (right) into slot in bracket*
3. *Tighten clamp*

Fig 3.3 - Fixing VHF to bracket

An alternative mounting method is to use the flush mounting kit FMB1000BK (supplied separately). This allows the radio to be neatly installed inside a bulkhead, so that only the fascia of the radio is visible. For more details of this and other accessories available, please refer to section 4.1.

2.7 Fistmike Operation

The RT62 and RT64 radios are available with either a telephone handset or fistmike. The fistmike incorporates three buttons which allows the user to remotely control some functions of the radio (Fig 2.10).

Fig 2.10 - Fistmike controls

The keys marked ∆ and ∇ are channel up and down keys. To move the selected channel up press the ∆ key, to move the selected channel down press ∇.

The centre key is user programmable (see section 2.7.1) and it can be set to activate one of the following functions -

- Backlight on/off
- Dual Watch
- User channel
- 1/25W

NOTE

The RT62 and RT64 cannot be used in conjunction with the FTM4 fistmike or THS4 telephone handset as used on the previous RT1200 and RT1400 VHF radios manufactured by Simrad. If ordering a replacement fistmike of handset, ensure that the correct part number is ordered (see section 4.1).

2.7.1 User Programmable Key

To program the user key function, turn the radio off, then press and hold the user key on the fistmike while switching the radio on (Fig 2.11) - the display on the radio will show **UP** (User Programming).

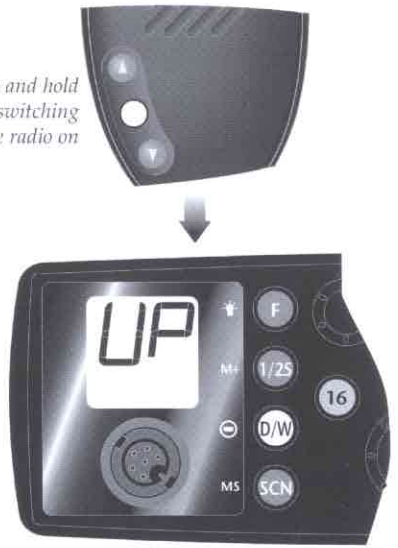


Fig 2.11 - Programming the user key to activate Dual Watch

- To select backlight, press **F** (☼ on non scan versions)
- To select Dual Watch, press **D/W**
- To select the User Channel, press **16** (**P** - non scan versions)
- To select 1/25W, press 1/25

When the function has been programmed, the display will show OK The radio should then be turned off - when it is switched on again the radio will return to normal operation with the fistmike user key programmed as specified.

NOTE The default setting for the fistmike user key is select User Channel.

3 INSTALLATION

3.1 VHF Installation

The radio should be sited so that engine noise and vibration or other background noise do not make it difficult for the operator to hear.

Although the RT62/RT64 radio is waterproof when flush mounted, it is recommended that it is not installed where it will be exposed to continuous direct sunlight, as this will eventually damage the LCD display.

As microphones and loudspeakers contain powerful magnets, the radio should not be installed within 1m (3ft 3in) of any compasses, whether magnetic or electronic.

The fins on the back of the case act as a heatsink to dissipate heat generated by the set when in use, which maintains the high efficiency of the radio. The free circulation of air is essential - if mounting the radio in an enclosed space, ensure that the space is vented.

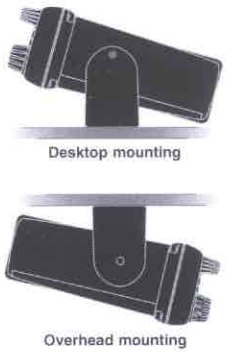


Fig 3.1 - Standard mounting options

The VHF is supplied with a reversible mounting bracket. This can be used to mount the VHF on the chart table or on an overhead bulkhead (Fig 3.1). The bracket is fixed in place using four No.10x3/4 screws (supplied). Before installing, ensure that there is at least 88mm (3.5 in) vertical clearance and 70mm (2.8in) horizontal clearance behind the bracket to allow the radio to fit (Fig 3.2).

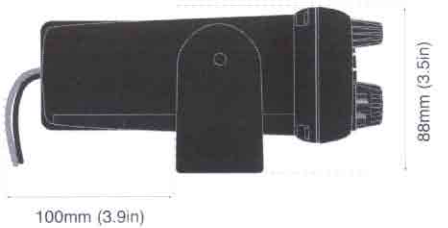


Fig 3.2 - Minimum clearance required