

## Wired handset installation instructions

### Obtain the complete documentation for your product

The supplied printed documentation is a subset of the full documentation available for your product.

**Important:** The latest versions of all English and translated handbooks are available on the Raymarine website. Please check the website to ensure you have the latest and complete documentation and safety information for your product.

[www.raymarine.com/manuals](http://www.raymarine.com/manuals)



### Warning: Product installation and operation

- This product must be installed and operated in accordance with the instructions provided. Failure to do so could result in personal injury, damage to your vessel and/or poor product performance.
- Raymarine recommends certified installation by a Raymarine approved installer. A certified installation qualifies for enhanced product warranty benefits. Contact your Raymarine dealer for further details, and refer to the separate warranty document packed with your product.

### Product disposal

Dispose of this product in accordance with the WEEE Directive. The Waste Electrical and Electronic Equipment (WEEE) Directive requires the recycling of waste electrical and electronic equipment which contains materials, components and substances that may be hazardous and present a risk to human health and the environment when WEEE is not handled correctly.



Equipment marked with the crossed-out wheeled bin symbol indicates that the equipment should not be disposed of in unsorted household waste.

Local authorities in many regions have established collection schemes under which residents can dispose of waste electrical and electronic equipment at a recycling center or other collection point.

For more information about suitable collection points for waste electrical and electronic equipment in your region, refer to the Raymarine website: [www.raymarine.com/manuals](http://www.raymarine.com/manuals).

### Wired handset

The Wired handset is compatible with the Ray60, Ray63, Ray70, Ray73, Ray90 and Ray91 VHF DSC radios.

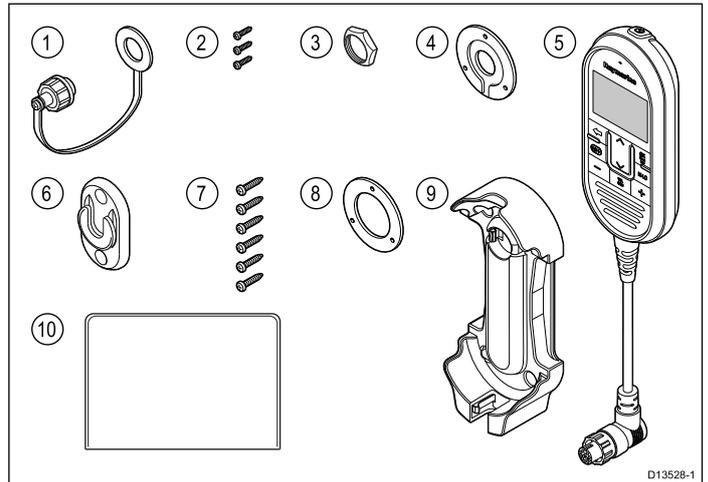
#### Ray60 / Ray63 / Ray70 / Ray73

The Wired handset can be connected directly, or via an adaptor cable, to the second station connector located on the rear of the radio to create a second handset station.

#### Ray90 / Ray91

The Wired handset can be connected to the handset station connectors on a Ray90 and Ray91, a total of 2 Wired handsets can be connected.

### Parts supplied



1	Through panel cable mounting dust cap.	6	Handset hook plate.
2	Through panel cable mounting plate screws x 3.	7	Handset holster and hook plate mounting screws x 6.
3	Through panel cable mounting nut.	8	Through panel cable mounting plate gasket.
4	Through panel cable mounting plate.	9	Wired handset holster.
5	Raymic wired handset.	10	Documentation.

Unpack your product carefully to prevent damage or loss of parts. Check the box contents against the list above. Retain the packaging and documentation for future reference.

### Wired handset and VHF radio software compatibility

The wired handset's software version must be compatible with the software installed on your DSC VHF radio.

#### Ray90 / Ray91 software compatibility

To be compatible with a Ray90 or Ray91 the handset must be running software version VH1.26 or greater.

#### Ray63 / Ray73 software compatibility

To be compatible with a Ray63 or Ray73 the handset must be running software version VH1.40 or greater.

#### Ray60 / Ray70 software compatibility table

Base Station software	Compatible Handset software
V1.40	VH1.40
V1.40	VH1.26 / VH1.09
V1.39	VH1.09
V1.35	VH1.06
V1.31	VH1.06
V1.24	VH1.01 / VH1.04
V1.22	VH1.01 / VH1.04
V1.13 (Ray70 introduction)	VH1.01 / VH1.04

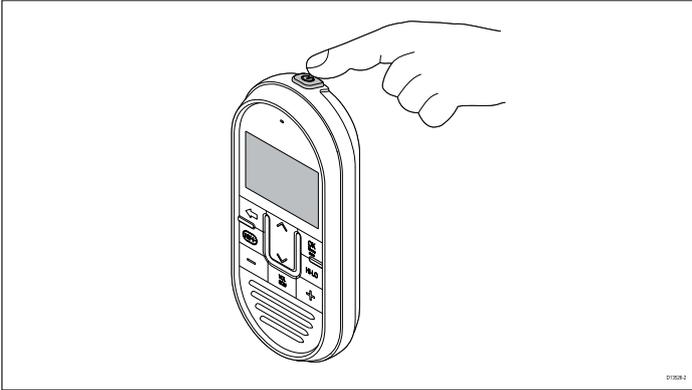
Base Station software	Compatible Handset software
V1.06 ( <b>Ray60</b> introduction)	VH1.01 / VH1.04
V1.04 ( <b>Ray50</b> only)	N/A

**Important:**

Please ensure compatible software versions are installed on both the VHF Radio and wired handset. The wired handset will not operate correctly if incompatible software versions are used.

## Powering the handset

To power the Handset on and off follow the steps below.

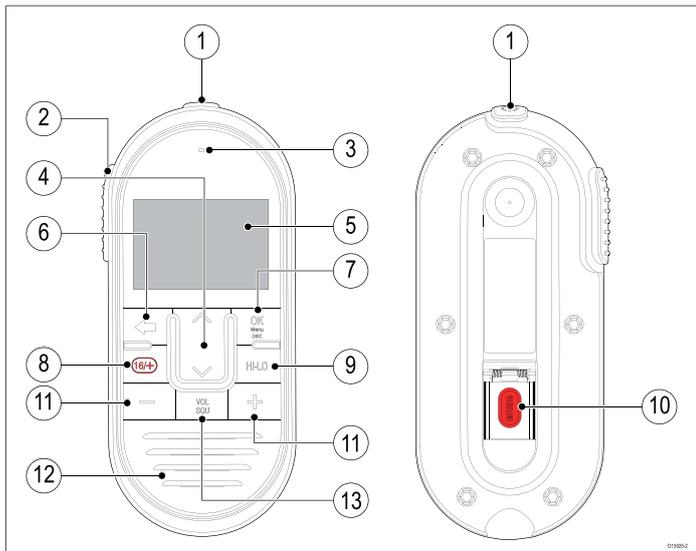


With the Base station powered On:

1. Press and hold the **Power** button, located on the top of the Handset, for 2 seconds.  
The Handset will power on.
2. To power off the Handset, press and hold the **Power** button for approximately 3 seconds, until the screen turns off.

## Handset controls

Overview of wireless handset controls.



1. **Power** — Press to power the handset on. Press and hold for 3 seconds to power the handset off. Momentary press to access the shortcut list.
2. **PTT** (Push to Talk) — Press and hold to send a voice message. Release to return to receive mode.

**Note:** The maximum transmit time is limited to 5 minutes to prevent unintentional transmissions from occupying the VHF channel.

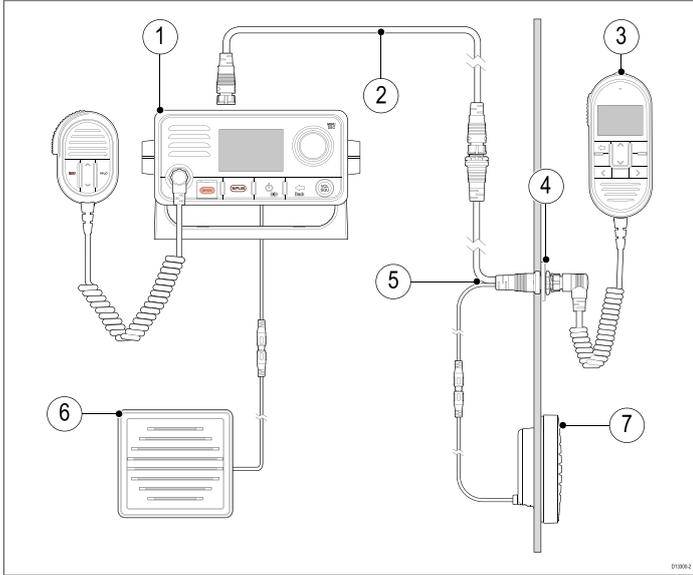
### 3. Microphone location

4. **Channel Up** and **Channel Down** — Changes to the next or previous VHF channel, also used to select or adjust options in the menu.
5. **LCD display**
6. **Back** — Go to the previous menu / screen. Press and hold to return to the Homescreen.
7. **OK / menu button** — Press button to access menu / DSC functions and to confirm selections.
8. **16 / +** — When powered on press to switch between priority channels.
9. **HI/LO** — Press to switch between High (25 W) and Low (1 W) transmit power.
10. **DISTRESS** — Lift up the spring-loaded cover and press this button to make a DSC distress call.
11. **Volume Up** and **Volume Down** — Press to adjust volume or squelch intensity up or down.
12. **Built-in speaker**
13. **VOL/SQ** — Press button to switch between volume and squelch controls.

# Ray60 / Ray63 / Ray70 / Ray73

## Secondary handset station

The Raymic handset accessory can be connected to the Secondary station connector located on the rear of the radio, this will create a second fully functional station.



1. Primary station
2. Handset extension cable (A80290, A80291 or A80292)
3. Secondary station handset (A80289)
4. Panel mount fixings kit (R70438)
5. Handset adaptor cable with RCA audio (A80297)
6. Primary station passive speaker (A80542)
7. Secondary station passive speaker (A80542)

**The Fistmic must NOT be used to create a second station, as the operator will not have access to all Radio functions or the information displayed on the Radio's LCD screen.**

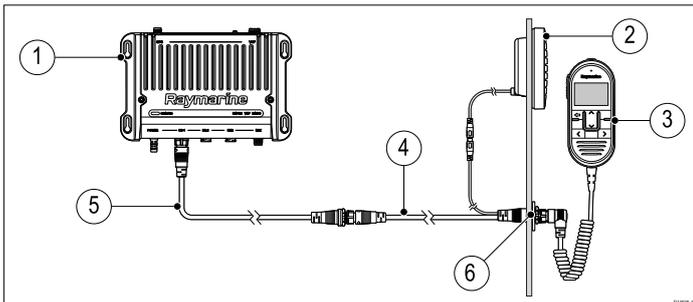
### Alarm behavior for secondary station passive speaker

The A80297 adaptor cable can be used to connect an additional passive speaker to the secondary station. A passive speaker connected to the second station will only receive voice audio. Alarms will NOT be heard from the passive speaker when it is connected to the Secondary station connector.

## Ray90 - Ray91

### Handset station connection

A Wired handset can be connected to each Handset station connection (HS 1 / HS 2). Your radio is supplied with the equipment to create a full handset station (i.e.: Wired handset, Adaptor cable and Passive speaker). Additional accessories can be purchased to create a second wired handset station.



1. Base station
2. Passive speaker (1 x supplied and available as accessory: A80542)

3. Wired handset (1 x supplied and available as accessory: A80289)
4. Handset station adaptor cable with RCA Audio 400 mm (1.3 ft) (1 x supplied and available as accessory: A80297)
5. Wired handset extension cable (Available optional accessories: A80290 – 5 m, A80291 – 10 m or 15 – A80292)
6. Panel mount fixings kit (1 x supplied and available as a Spare: R70438)

### Connecting handsets and cables

Follow the steps below to connect handsets and extension cables together.

1. If fitted, unscrew and remove the dust cap from the relevant connector.
2. Ensure the cable connectors are correctly orientated, before insertion.
3. Ensure connectors are fully inserted, before locking..
4. Tighten locking collars by Rotating clockwise.

## Wired handset extension cables

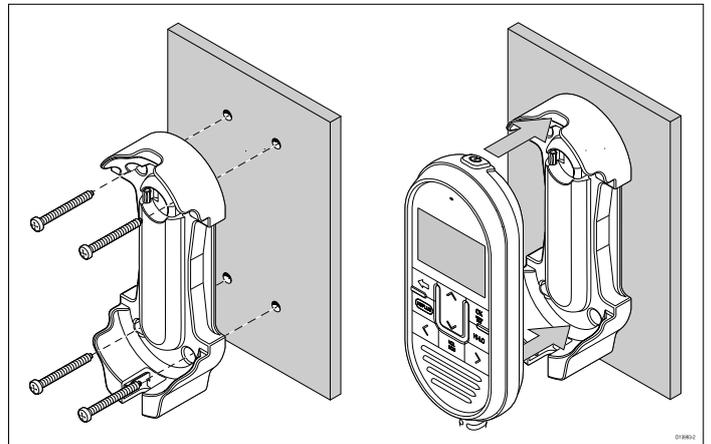
Handset station cabling can be extended using approved extension cables.

The maximum length of cable from the Handset to the Base station should not exceed 50 m (164 ft)

## Wired handset mounting using the holster

Follow the steps below to mount the wired handset.

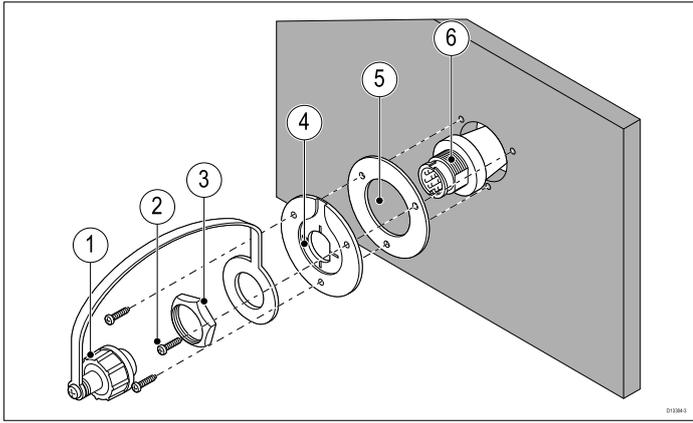
Before mounting, ensure that your selected location meets the location requirements found in this document.



1. Check the selected location for the mounting holster, a clear flat area is required, with sufficient space around it to place and remove the handset.
2. Using a pencil, offer up the holster to the desired location and mark the location of the screw holes on the mounting surface.
3. Drill the mounting holes using a suitable size drill bit.
4. Hold the holster in place and secure using the screws provided.
5. Place the handset into the holster until it clicks into position.

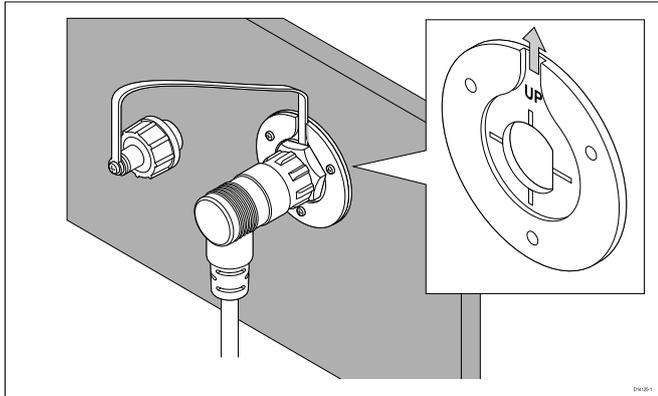
# Pass-through panel kit mounting

When installing handsets, the pass-through panel kit should be used to secure the cable's connector to the panel the cable has to pass through.



1	Splash-proof dust cap with lanyard
2	Mounting plate fixings x 3
3	Mounting plate nut
4	Mounting plate
5	Mounting plate gasket
6	Extension cable

1. Check the selected location for the Mounting plate, a clear flat area is required.
2. Ensuring correct orientation of the mounting plate, offer up the plate to the desired location and mark the location of the screw holes and the center hole on the mounting panel.



To ensure that the handset's connector points down when connected, orientate the mounting plate so that the lanyard groove is pointing straight up.

3. Drill the mounting holes using a suitable size drill bit.
4. Drill the center hole using a 25 mm (1 in.) hole cutting saw.
5. Pull the connector end of the cable through the hole in the mounting surface.
6. Place the Mounting plate gasket over the end of the connector.
7. With the recessed side facing away from the mounting panel, place the Mounting plate over the end of the connector.
8. Place the lanyard end of the Splash-proof dust cap over the connector, ensuring the lanyard sits in the recess in the Mounting plate.
9. Place the Mounting plate nut over the connector and tighten clockwise using a 13/16 in. (21 mm) socket wrench, being careful not to damage the plastic nut by overtightening.
10. Secure the Mounting plate to the mounting surface using the supplied screws.
11. Attach the Handset / Fismic connector to the cable connector and rotate the locking collar clockwise to secure.

12. Connect the opposite end of the cable to the required connector either on the Base station or to another pass-through panel mounting plate connector.

**Note:**

Drill bit, tap size and tightening torque is dependent on the thickness and type of material the unit is to be mounted on.

## Operation instructions

For operation instructions for your handset, refer to the documentation that accompanies your Radio.



**All product documentation is available to download from the Raymarine website: [www.raymarine.com/manuals](http://www.raymarine.com/manuals)**

- Ray60 / Ray70 Installation and operation instructions document number: 81356
- Ray63 / Ray73 Installation and operation instructions document number: 81381
- Ray90 / Ray91 Installation and operation instructions document number: 81377

## Technical specification – Wired handset (Raymic)

The following technical specifications apply to the Wired handset.

Operating temperature	-25°C (-13°F) to +55°C (131°F)
Storage temperature	-25°C (-13°F) to +70°C (158°F)
Relative humidity	95%
Water proofing	IPx6 & IPx7
Max speaker power output	1 W (16 Ω)
VHF radio compatibility	<ul style="list-style-type: none"> <li>• Ray90 / Ray91</li> <li>• Ray63 / Ray73</li> <li>• Ray60 / Ray70</li> </ul>