

## Wireless handset and charging holster 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).

### Wireless handsets

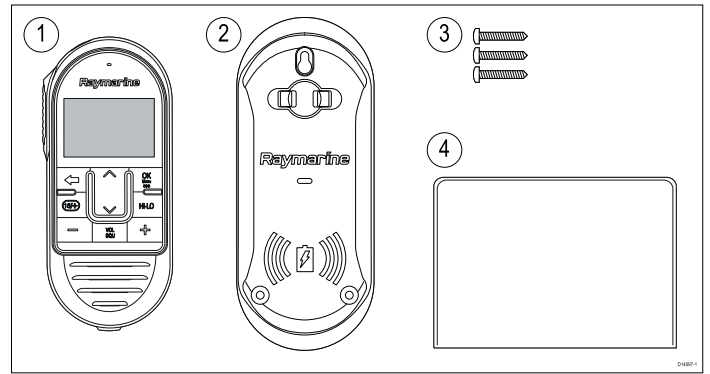
Wireless handsets are compatible with Ray63, Ray73, Ray90 and Ray91 VHF DSC radios.

As a minimum the Wireless hub and Wireless handset accessories are required to create a wireless handset station. Additionally a Wireless speaker can be connected to each Wireless handset.

After connecting your Wireless hub to your VHF Radio, the process for setting up a wireless handset station should be:

1. Fully charge the Wireless handset.
2. Connect the Wireless handset to the Wireless hub.
3. If required, connect a Wireless speaker to the Wireless handset.

### Parts supplied



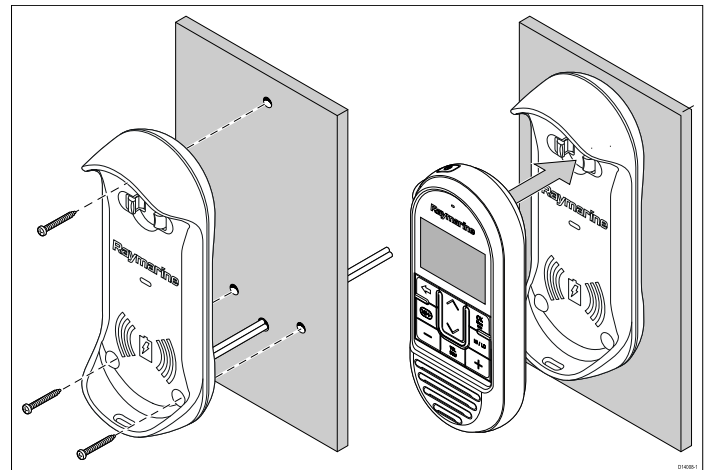
1. Wireless handset.
2. Wireless handset holster/ inductive charger.
3. 3 x fixings screws (M4x25).
4. Documentation.

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.

### Mounting the charging holster for the wireless handset

Before mounting, ensure that:

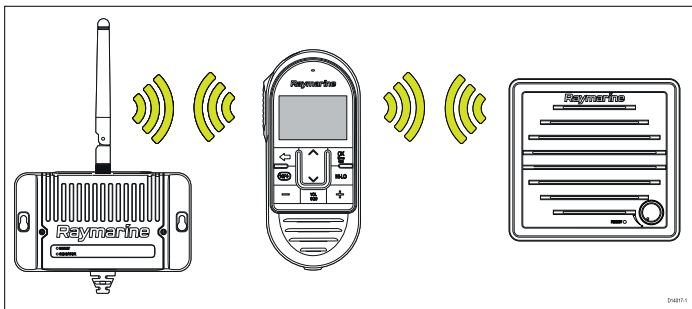
- Your selected location meets the location requirements found in this document.
- You pay particular attention to the wireless location requirements.
- The product operates correctly at the desired location before mounting.
- The product does not interfere with nearby devices.



1. Using the supplied mounting template mark the location of the mounting holes and if required, the cable hole.
2. Drill the mounting holes using a suitable size drill bit.
3. If required, use a 6.5 mm (0.26 in) drill bit to drill a hole for the holster's power cable.
4. Hold the holster in place and secure using the screws provided.
5. Place the Handset into the holster, ensuring it clicks into position.

### Wireless handset connections

The Wireless handset connects wirelessly to the Wireless hub, and the Wireless speaker connects wirelessly to the Wireless handset.



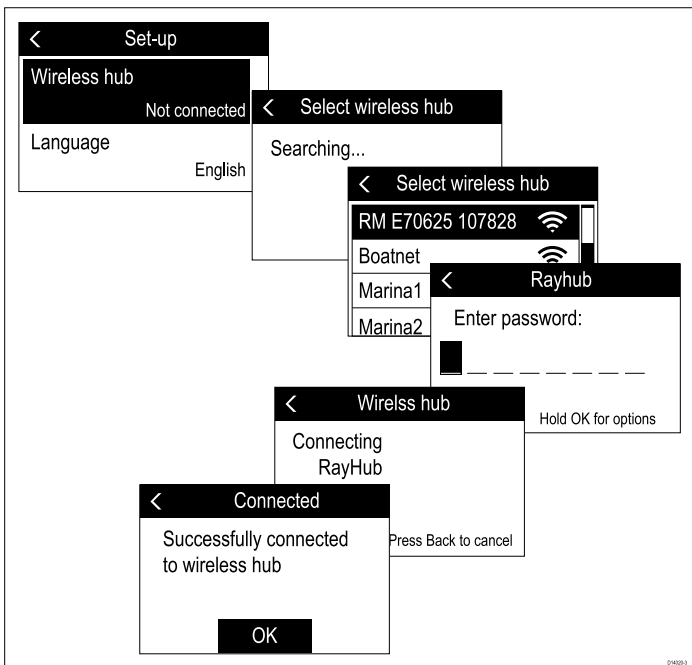
Up to 3 Wireless handsets can be connected to the Wireless hub. Refer to [Connecting a wireless handset to the hub](#) for the connection procedure.

One Wireless speaker can be connected to each Wireless handset. Refer to [Connecting the wireless speaker to the Wireless handset](#) for the connection procedure.

## Connecting a wireless handset to the hub

Wireless handsets must be connected to the radio via a Wireless hub.

When the Wireless handset is powered on for the first time you will need to connect it to a Wireless hub.



### 1. Select **Wireless hub**.

The handset will display a list of wireless devices in range.

### 2. Select your Wireless hub from the list.

*The Wireless hub's default name is 'RM' followed by the 6 digit part number and 7 digit serial number of the radio that the Wireless hub is connected to (e.g.: Radio part number: E70625 and serial number: 1070828 = Hub name: RM E70625 107828).*

### 3. Enter the password.

*You can check the Wireless hub's password using a Wired handset by selecting: **Menu > Set-up > Wireless set-up > Wireless hub set-up > Password**.*

The handset will now connect to the Wireless hub.

### 4. Select **OK**.

## Changing your wireless hub's password

If desired you can change the Wireless hub's default password using a Wired handset.

1. Select **Wireless hub set-up** from the **Wireless set-up** menu: (**Menu > Set-up > Wireless set-up > Wireless hub set-up**).
2. Select **Password**.

3. Use the **Channel Up**, **Channel Down** and **OK** buttons to change the default password.

*The password can use up to 8 characters. For the most secure password use a variety of upper and lower case letters, numbers and symbols.*

4. When finished, select **OK** to confirm.
5. Re-connect your Wireless handset to the hub following the [Connecting a wireless handset to the hub](#) procedure.

### Note:

- While the password change is being applied the **Wireless set-up** menu will be unavailable.
- Ensure you make a note of your Hub's new password.

## Changing the hub's wireless channel

If you experience interference with your wireless handset station then you can change the wireless channel used by the hub to a channel that is less congested with Wireless signals.

You must use a Wired handset to change the Hub's wireless credentials.

1. Select **Wireless hub set-up** from the **Wireless set-up** menu: (**Menu > Set-up > Wireless set-up > Wireless hub set-up**).
2. Select **Wireless channel**.
3. Select a wireless channel.

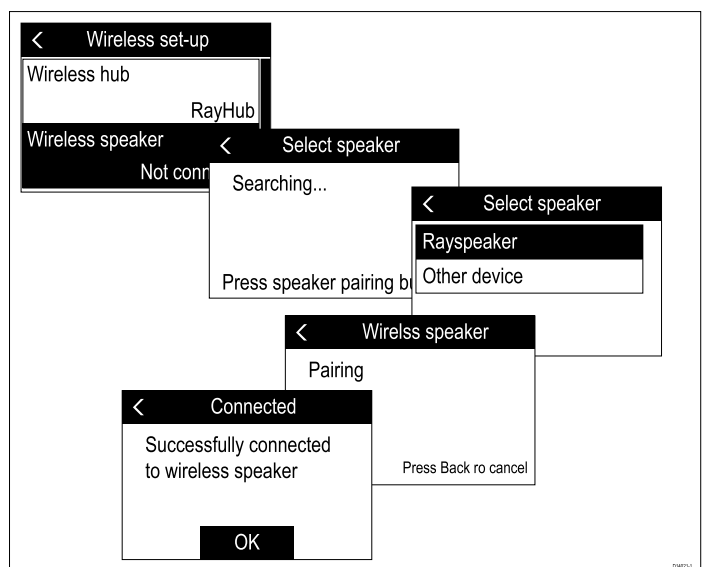
*Channels 1 to 13 are available, use a wireless network analyzer to find the least congested channel. The preferred wireless channels are 1, 6 and 11 as these overlap with the fewest other wireless channels, however if these channels are congested then try others.*

### Note:

- While the channel change is being applied the **Wireless set-up** menu will be unavailable.
- Your Wireless handset will automatically reconnect to the hub using the new channel.

## Connecting the wireless speaker to the Wireless handset

You can connect a Wireless speaker to your Wireless handset.



1. Power on the Wireless speaker.
  2. Press the **Pairing** button on the front of your Wireless speaker to pair with a Wireless handset for the first time.
  3. Using the Wireless handset, select **Wireless speaker** from the **Wireless set-up** menu: **Menu > Maintenance > Wireless set-up**
- The handset will search for available devices.

4. Select your Wireless speaker from the list.

The Wireless handset will now pair with the Wireless speaker.

5. Select **OK**.

The Wireless handset's audio will now be heard through the Wireless speaker.

**Note:**

- You can only output audio to 1 speaker from the same handset.
- If the pairing is unsuccessful, power the wireless speaker off and then back on again and repeat the process.

**Disconnecting a Wireless speaker**

To disconnect your Wireless speaker from the Wireless handset follow the steps below:

With the speaker connected to the handset:

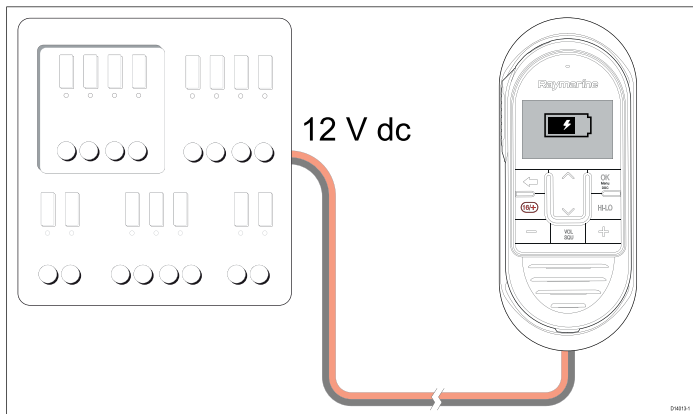
1. Press the **Pairing** button on the front of the speaker.
2. Once disconnected the speaker can be connected to any Wireless handset by following the [Connecting a wireless speaker to the wireless handset](#) procedure.

**Wireless handset charging**

When inserted into the wireless handset charging holster the wireless handset will be charged using inductive charging.

**Attention**

Ensure your wireless handset is fully charged before use.



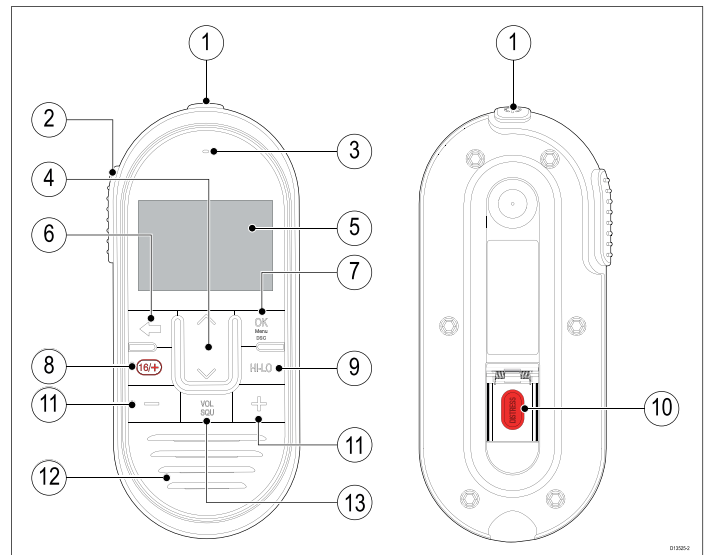
	<b>Charging</b> Whilst charging a battery symbol will gradually fill up.
	<b>Charged</b> When fully charged the battery symbol will be full.

With the Handset powered on the battery symbol will be displayed in the status bar at the top of the screen.

With the handset powered off the battery symbol is displayed fullscreen.

**Handset controls**

Overview of wireless handset controls.



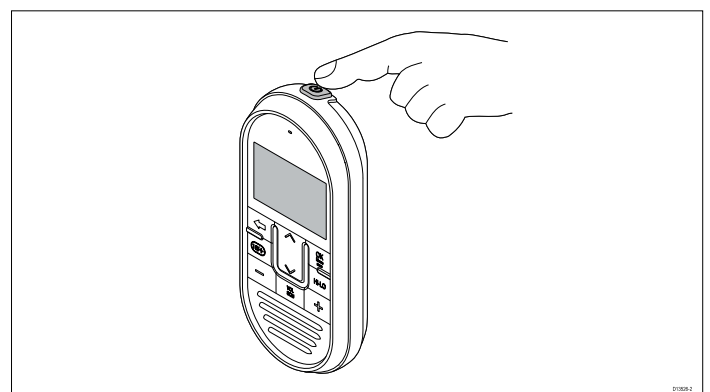
1. **Power** — Press to power the handset on. Press and hold for 3 seconds to power the handset off. Momentary press to access the shortcut list.
2. **PTT (Push to Talk)** — Press and hold to send a voice message. Release to return to receive mode.

**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.

**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.

## Operation instructions

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

	<p>All product documentation is available to download from the Raymarine website: <a href="http://www.raymarine.com/manuals">www.raymarine.com/manuals</a></p> <ul style="list-style-type: none"> <li>• Ray90 / Ray91 Installation and operation instructions document number: 81377</li> <li>• Ray63 / Ray73 Installation and operation instructions document number: 81381</li> </ul>
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Fuse requirements	<ul style="list-style-type: none"> <li>• Inline fuse = 2 A</li> <li>• Thermal breaker = 2 A</li> </ul>
Current consumption	1 A nominal
Charge type	Wireless inductive charging
Power output	1 A

### Environmental specification

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

## Technical specification - Wireless handset

### Wireless 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)
Wireless frequency	2.4 GHz
Connections	<ul style="list-style-type: none"> <li>• x 1 Wireless hub connection via 2.4GHz wireless connection</li> <li>• x 1 Wireless (Active) speaker via 2.4GHz wireless connection</li> </ul>
VHF radio compatibility	<ul style="list-style-type: none"> <li>• Ray90 / Ray91</li> <li>• Ray63 / Ray73</li> </ul>

### Battery

Battery type	Rechargeable Lithium ion
Replaceable	No
Capacity	2000 mAh
Talk time	8 hours
Standby	100 hours
Charge time	5 hours

## Technical specification - Wireless handset charging holster

### Power specification

Nominal supply voltage	12 V dc (with over voltage protection)
Operating voltage range	10.2 V dc to 16 V dc