



# CORTEX® H1 HANDSET INSTALLATION INSTRUCTIONS

## **Important Safety Information**

#### **↑** WARNING

See the *Important Safety and Product Information* guide in the product box for product warnings and other important information.

Failure to install this device according to these instructions could result in personal injury, damage to the vessel or device, or poor product performance.

To avoid possible personal injury or damage to the device and vessel, disconnect the vessel's power supply before beginning to install the device.

#### **△** CAUTION

To avoid possible personal injury, always wear safety goggles, ear protection, and a dust mask when drilling, cutting, or sanding.

#### **NOTICE**

To avoid damage to your boat, this device should be installed by a qualified marine installer. Specific knowledge of marine electrical systems is required for proper installation.

When drilling or cutting, always check what is on the opposite side of the surface to avoid damaging the vessel. If you are mounting the device in fiberglass, when drilling the pilot holes, use a countersink bit to drill a clearance counterbore through only the top gel-coat layer. This will help to avoid cracking in the gel-coat layer when the screws are tightened.

#### **Tools and Supplies Needed**

- Drill
- Drill bit suitable for drilling pilot holes in the mounting surface
- 3 mm  $(^{1}/_{8}$  in.) drill bit suitable for drilling a cable pass-through hole in the mounting surface
- · Phillips screwdriver
- 16 AWG (1.5 mm²) 2-conductor electrical cable long enough to reach the bulkhead connector mounting location from the battery
- Waterproof wire connectors
- 2 A fuse or breaker
- Marine sealant (optional)
- · Plastic prying tool or small flat screwdriver

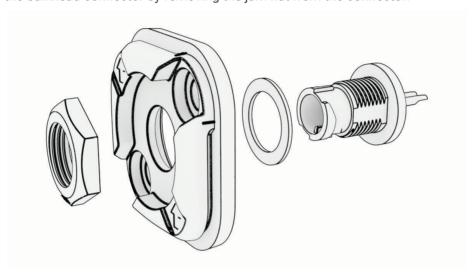
## **Mounting Considerations**

When selecting a mounting location, observe these considerations.

- You should select mounting locations for the cradle and the bulkhead connector that are close to each other, to avoid unnecessary strain on the handset cable and connector.
- You must select a mounting location for the bulkhead connector with at least 60 mm (2<sup>12</sup>/<sub>32</sub> in.) of clearance behind the bulkhead
- You must select a mounting location that is within range of the Wi-Fi® network used to connect to the Cortex hub¹.

## **Preparing the Bulkhead Connector Mounting Surface**

1 Disassemble the bulkhead connector by removing the jam nut from the connector.



- 2 Set aside the jam nut, the connector, and the washer.
- 3 Using the bulkhead connector plate as a template, mark the location of the two pilot holes and the center of the through-hole for the power cable.
  - **NOTE:** In most cases, you should install the bulkhead connector plate with the arrows pointing up, so that the handset cable will hang down when connected.
- **4** Reassemble the bulkhead connector by feeding the connector through the washer and the bulkhead connector plate, and reinstalling the jam nut.
- 5 Drill the two pilot holes for the mounting screws and the through-hole for the power cable.

<sup>&</sup>lt;sup>1</sup> The Cortex hub can broadcast its own Wi-Fi network or it can use the boat's Wi-Fi network to connect to Cortex handsets and the Cortex Onboard app. See the Cortex hub *Owner's Manual* for more information.

## **Installing the Bulkhead Connector**

Before installing the bulkhead connector, you must prepare the mounting surface (*Preparing the Bulkhead Connector Mounting Surface*, page 2).

#### **NOTICE**

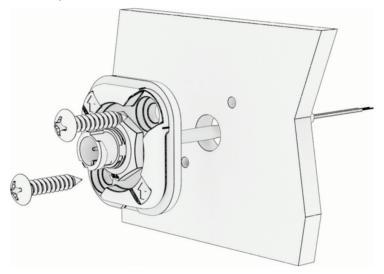
When connecting wires, you must use waterproof connectors to protect the conductors from corrosion that can lead to product malfunction.

- 1 Route a 2-conductor, 16 AWG (1.5 mm²) marine-grade electrical cable (not included) between the mounting location and the power supply.
- 2 Route the power cable through the hole you drilled into the mounting surface.
- 3 Connect the positive wire from the power supply to the red wire on the bulkhead connector, and the negative wire from the power supply to the black wire on the bulkhead connector.

#### NOTICE

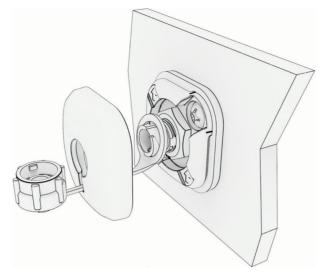
You must connect a 2 A inline fuse to the positive wire, near the power supply, to properly protect the cable from damage in case of an electrical short.

- 4 If the mounting location is exposed to the weather, apply marine sealant to the mounting screws and around the cable pass-through hole, to protect the mounting surface material from moisture.
- 5 Place the bulkhead connector plate on the bulkhead, and secure it to the bulkhead using two screws.



**NOTE:** In most cases, you should install the bulkhead connector plate with the arrows pointing up, so that the handset cable will hang down when connected.

**6** Feed the weather cap retaining ring through the keyhole-shaped slot in the finish plate, and place the ring around the connector.



7 Snap the finish plate in place.

## Installing the Cradle

1 Using a plastic pry tool or a small flat screwdriver, remove the cover plate from the handset cradle.



- 2 Place the cradle in the mounting location, and mark the three pilot holes.
- 3 Remove the cradle.
- 4 Using a drill bit suitable for the mounting surface and the mounting screws, drill the three pilot holes.
- **5** If the mounting location is exposed to the weather, apply marine sealant to the mounting screws, to protect the mounting surface material from moisture.

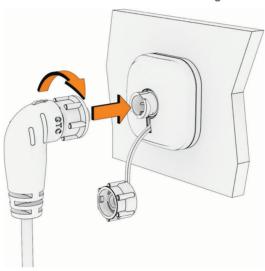
**6** Secure the cradle to the mounting surface using the included screws.



7 Snap the cover plate back in place.

# **Connecting the Handset to Power**

Connect the handset power cable to the bulkhead connector and tighten the locking ring.



## **Using the Cradle**

• Place the bottom of the handset in the cradle and push it back to lock it into the cradle.



• To remove the handset, push the retaining latch back to release the handset from the cradle.



# **Connecting the Handset to the Cortex Hub**

- 1 Turn on the handset.
- 2 Select .
- 3 Enter the SSID and password for the Cortex hub's Wi-Fi network. The SSID and password can be found on the back of the Cortex hub.
- 4 Select Connect.

# **Specifications**

Dimensions (H×W×D)	164.8 × 71.8 × 21.4 mm (6.5 × 0.8 × 0.9 in.)
Weight	285 g (0.63 lb.), including the power cable
Operating temperature range	From -25° to 55°C (from -13° to 131°F)
Storage temperature range	From -25° to 70°C (from -13° to 158°F)
Compass-safe distance	80 cm (31.5 in.)
Water rating	IEC 60529 IPX8 <sup>2</sup>
Power supply	12 or 24 VDC
Maximum power	12 W (1 A at 12 V)
Sound output	3W Class D amplifier, THD < 5% @ 85dBA
EU SAR	0,01 W/kg torso, 0,07 W/kg limb

# Viewing E-label Regulatory and Compliance Information

1 Press =

2 Select Settings > Certifications.

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<sup>&</sup>lt;sup>2</sup> The device withstands incidental exposure to water of up to 2 m for up to 60 min. For more information, go to garmin.com/waterrating.