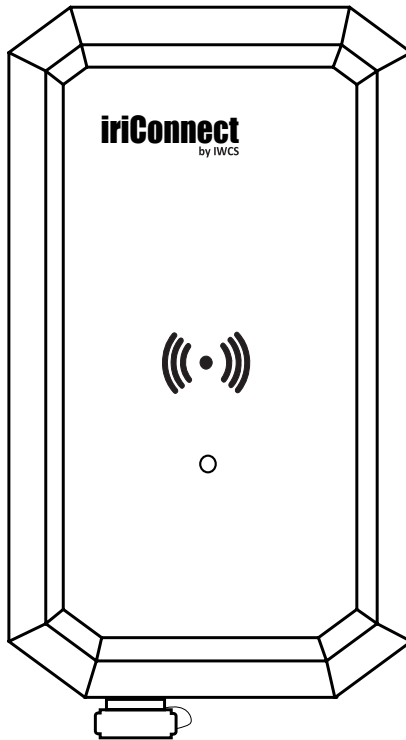


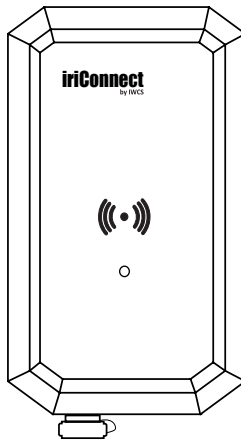
User manual



iriConnect

CONGRATULATIONS ON YOUR NEW PRODUCT FROM
IRIDIUM WATERPROOF COMMUNICATION SYSTEMS

iriConnect



IWCS HOPE YOU WILL ENJOY THE BENEFITS OF TROUBLE
FREE HIGH QUALITY INTERCOM. PLEASE READ THESE
INSTRUCTIONS CAREFULLY BEFORE FIRST USE.
IF INSTALLED, OPERATED AND MAINTAINED
ACCORDING TO THIS MANUAL THE iriConnect WILL BE A
RELIABLE PARTNER FOR MANY YEARS TO COME.

THOMAS B SVENNINGSSEN
CO-FOUNDER OF IWCS

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Introduction

1.1 Disclaimer

Any responsibility or liability for loss or damage in connection with the use of this product and the accompanying documentation is disclaimed by IWCS.

The information in this manual is provided for information purposes only, is subject to change without notice and may contain errors or inaccuracies.

Manuals issued by IWCS are periodically revised and updated.

Anyone relying on this information should acquire the most current version e.g. upon request at info@iwcs.eu.

IWCS is not responsible for the content or accuracy of any translations or reproductions, in the whole or in part, of this manual from any other source.

1.2 Copyright

2024 Iridium Waterproof Communication Systems ApS. All right reserved.

Printed in Denmark.

1.3 Trademark

iriConnect is a Trademark by Iridium Waterproof Communication Systems ApS.

Revision	Release date	Release note
1.1	19-03-2024	General Revisit
1.2	15-12-2025	General Revisit

1.4 Safety warning

The following general safety precautions must be observed during all phases of operation, service and repair of this equipment. Failure to comply with these precautions or with specific warnings elsewhere in this manual violates safety standards of design, manufacture and intended use of the equipment. IWCS assumes no liability for the customer's failure to comply with these requirements.

- **EMC / RF EXPOSURE**

iriConnect is CE certified as stated in the Declaration of Conformity.



- **FIRE**

In case of fire, harmful gases and fumes may occur.
One should immediately leave the area and seek help.
In case of suspected smoke in the lungs, a doctor should be consulted



- **POWER LOSS**

Power interruptions limited to IriConnect will not affect other users communication. A general power outage will turn off the entire intercom system. IWCS is not responsible for any power outages or consequences thereof, of any kind.



- **WARRANTY LIMITATIONS**

IMPORTANT - This unit is a sealed waterproof unit (classified IP67). To create and maintain its waterproof integrity it has been assembled in a controlled environment using special equipment. This unit is NOT a user serviceable unit, and under no circumstances should the unit be opened except by authorized personnel. Unauthorized opening of the unit will invalidate the warranty.



- **DISPOSAL**

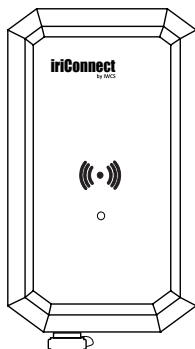
When disposing of IriConnect and related equipment, it must happen in accordance with applicable national law.



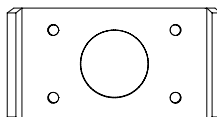
Unboxing

2.1 In The Box

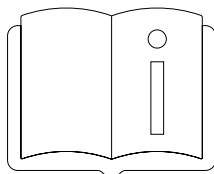
1 x iriConnect



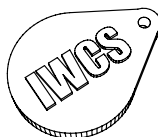
1 x Mounting Bracket



1 x User Manual



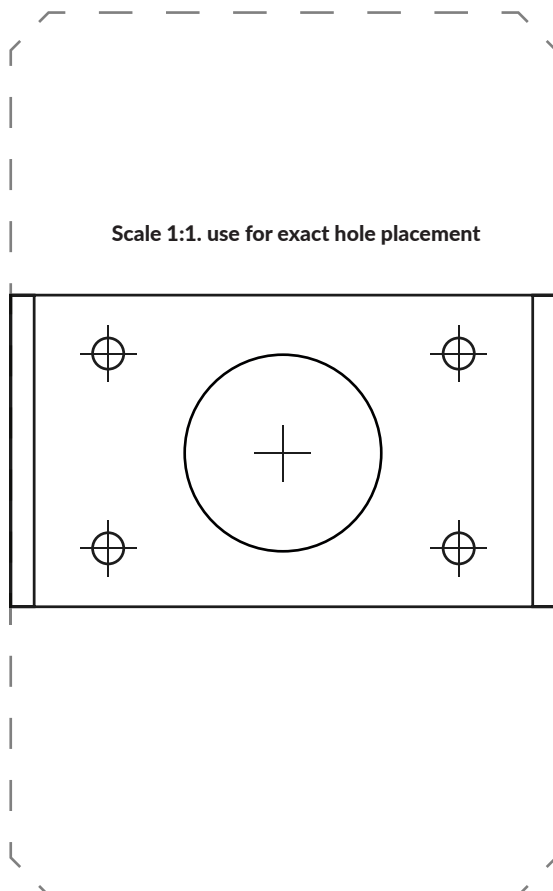
1 x Magnet





Installation

3.1 Drill Template 1:1



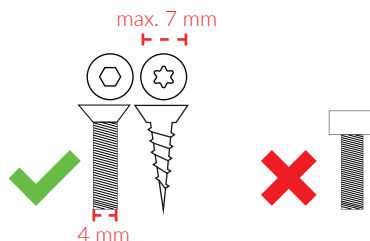
Backside of drill template

Installation

3.2 Tools

Before installation please prepare the following tools:

- Tape
- 4,5 or 3,3 mm drill bits
- 25 mm hole saw drill bit
- Drill
- Screw heads may not exceed 7 mm



3.3 Screws and drill bits

When mounting the IriConnect, it is essential to consider the material and the appropriate drill bit size. Please note the following guidelines:

If you are using wood screws you will need:

- 4x 4 mm screws.
- Drill 3.3 mm holes.

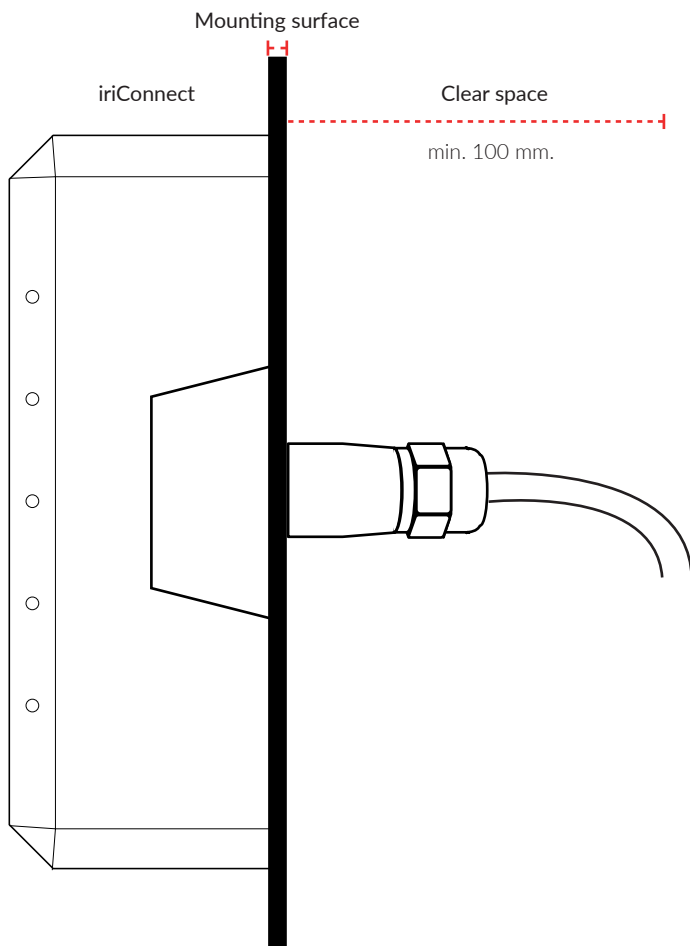
If you are using machine screws you will need:

- 4x 4 mm screws.
- 4x locking bolts.
- 4x washers.
- Drill 4.5 mm holes.

**Note that no mounting equipment is included in the box.*

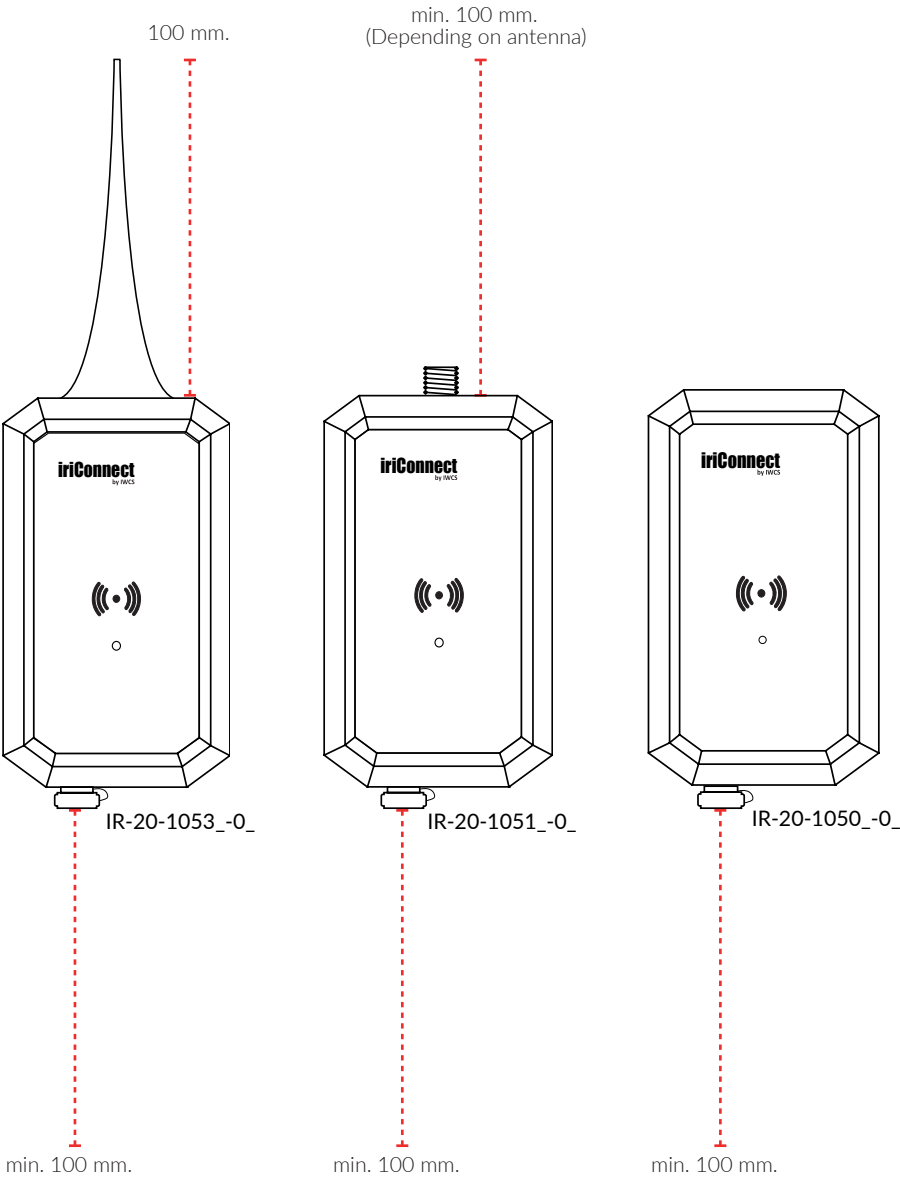
3.4 Clear space behind the unit

When installing the iriConnect, it's essential to take into account the space behind the mounting surface. IWCS recommends a **minimum of 100 mm** of clear space to avoid stressing the cables.



3.5 Clear space above and under the unit

Ensure that you are aware of the particular version of iriConnect during installation. Specifically, if you are installing the **IR-20.1053** or **IR-20-1051**, it's crucial to maintain a minimum clearance of 100 mm above and keep clear of the antenna.



3.6 Installing the Bracket

IMPORTANT: When determining the ideal location to mount the iriConnect, it's crucial to select the appropriate mounting surface:

Do not mount on or closer than 20 cm from electric leading materials e.g. steel, aluminum, carbon fiber etc.



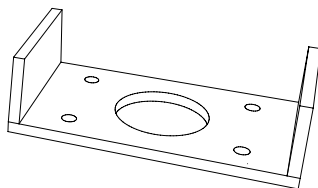
- Steel
- Aluminum
- Carbon fiber



- Wood
- Fiber glass/GRP
- Plexiglas

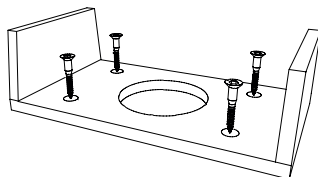
Placing the Bracket

The bracket serves as a secure mounting solution for the iriConnect. It is crucial to ensure that sufficient space is provided around the bracket to accommodate cables and wiring.



Screws and holes

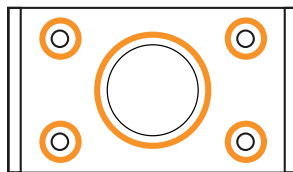
After determining the desired location for the iriConnect, select screws that are appropriate for the surface you will be mounting it on to. Depending on the material, you may need to drill holes prior to securing the bracket. Ensure the screws provide a secure hold to keep the iriConnect in place.



Sealing

Apply silicone based sealant in the mounting holes and around to the center hole.

Backside of bracket

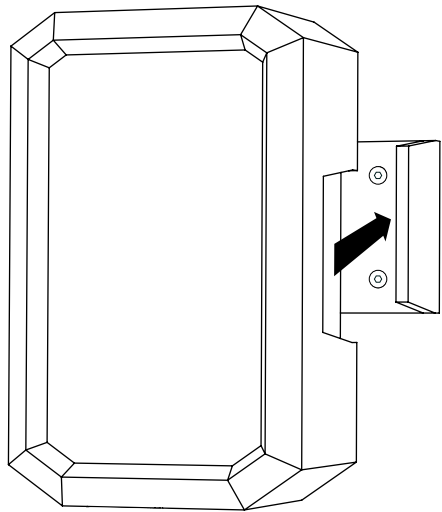


3.7 Installing the iriConnect

Once the bracket is securely in place, you can proceed to insert the iriConnect into the designated slot. You might need to wiggle the iriConnect slightly to make it fit between the bracket arms.

Securely in place

Gently use your hands to apply pressure and push the iriConnect into place within the bracket. Ensure a firm and secure fit by pressing it all the way until you feel a snap, indicating that it is properly seated in the sockets. It is important to note that this should be done manually without the use of any tools. Avoid excessive force or using tools as it may cause damage to the device or bracket.

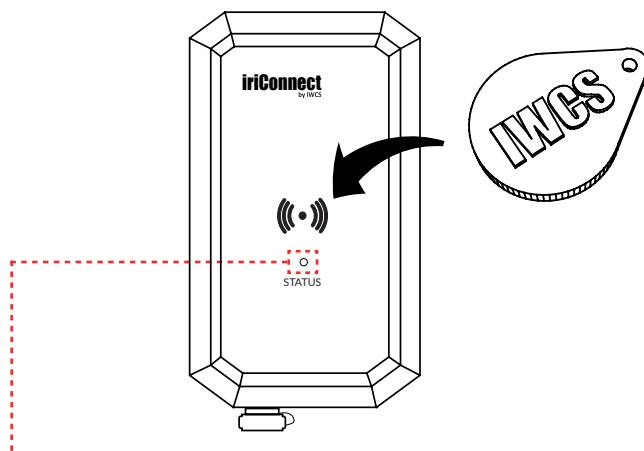


NOTE: This should be done manually without the use of any tools. Avoid excessive force or using tools as it may cause damage to the device or bracket.

Operation

4.1 Activate pairing mode

Place and hold the magnet on the "📶" icon to activate pairing mode.



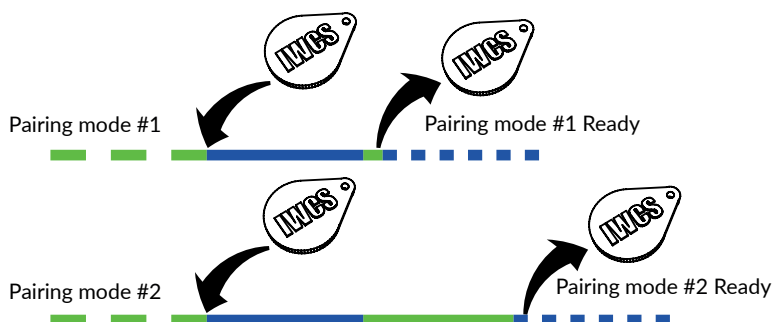
4.2 LED Indicator

DIGITAL ACCESSPOINT WITH MULTIPLE FUNCTION

iriConnect is the digital Audio/Data link between a wireless unit (Wireless headsets, 2.4 GHz radios, Mobile Phones) and an existing iriSound Intelligent Intercom System.

iriConnect routes the Audio from the external paired unit to iriSound and from the Mixed iriSound to the external paired unit.

iriConnect is also a gateway for a wireless PTT in a headset.



4.3 Install Start-up

When the interface cable is connected to both iriConnect and iriSound the STATUS indicator will light steady RED ● while communicating with the iriSound. When connection is established the LED turns into Flashing GREEN.

- Status: Power on - No connection 

Pairing mode #1 - Intercom

- Initial set your headset device into pairing mode
- Place the magnet in front of the mark. The LED indicator switches from flashing GREEN to steady BLUE. Hold the magnet until the status indicator turns GREEN again - remove immediately.
- LED Indicator flashes blue (fast) - iriConnect is in pairing mode 1 
- When the connection is established the LED flashes BLUE (slow) 

Pairing mode #2 - Phone / Vessel-to-vessel

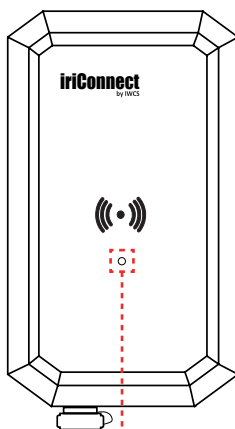
- Place the magnet in front of the mark until the status indicator turns GREEN again
- LED Indicator flashes blue (fast) iriConnect is in pairing mode 2
- Follow the pairing instructions on your headset device
- When the connection is established the LED flashes BLUE (slow)

4.4 Pairing and Indications

iriConnect has an LED indicator, giving important information.

iriConnect is powered from iriSound, and will have a steady GREEN indication when the Audio/Data cable is connected and iriSound is turned ON.

For pairing iriConnect with another device, iriConnect must be set into pairing mode.



Green Indicates

- Power ON
- System data OK
- Wireless connections not established



BLUE Indicates

- Wireless connection established



Fast Flashing BLUE Indicates

- Pairing mode



RED indicates

- Hardware data failure



Service and Maintenance

5.1 Specifications

iriConnect	Internal Antenna	External Antenna	External Antenna Connection
Weight	225g	250g	225g
Dimensions	110x75x50 mm	210x75x50 mm	110x75x50 mm
Radio	2,4 GHz		
Waterproof	IP67		
Temperature range	-20 to +60 °C		
Connectivity	IWCS Bus		
Audio resolution	16 bits		
Frequency range	20 - 16.000 Hz		
Power Supply	Powered by iriSound		
Antenna	-	3dBi dipole	RPTNC (male)
Part number	IR-20-1050_-O_	IR-20-1053_-O_	IR-20-1051_-O_

5.2 Cleaning

Do not use chemicals or solvents to clean your IriConnect. Use only fresh water. Pressure, friction, sharp objects, etc. can damage the product and the warranty may be void.

5.3 Warranty

iriConnect is covered by a two (2) year warranty.

5.4 Service / Upgrades

Any Service or additional Upgrades must be handled by IWCS Do not try to open or modify the IWCS product.

5.5 Maintenance

If your IWCS IriConnect has been exposed to saltwater, chemicals or any other solvents/liquids, immediately rinse with freshwater and wipe with a dry cloth.

iriConnect
is developed, designed and
manufactured by

IWCS Aps

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