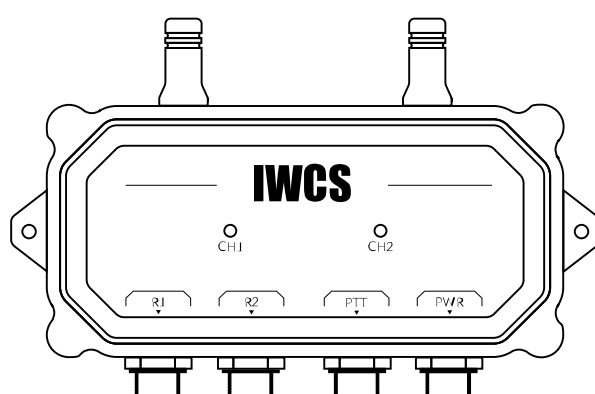


USER MANUAL

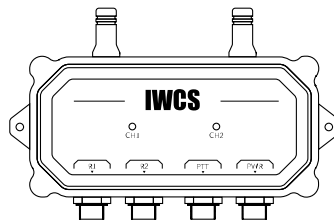


iriBridge-2R



CONGRATULATIONS ON YOUR NEW PRODUCT FROM
IRIDIUM WATERPROOF COMMUNICATION SYSTEMS

iriBridge-2R



IWCS hopes 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 iriBridge-2R will be a reliable partner for many years to come.

Thomas B. Svenningsen
Co-founder of IWCS

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01 · INTRODUCTION

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

© 2026 Iridium Waterproof Communication Systems ApS. All rights reserved. Printed in Denmark.

1.3 Trademark

iriBridge-2R is a trademark of Iridium Waterproof Communication Systems ApS.

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.

REVISION	RELEASE DATE	RELEASE NOTE
1.0	01-09-2026	

1.4 SAFETY WARNING — CONTINUED



EMC / RF EXPOSURE

iriBridge-2R 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 iriBridge-2R 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.



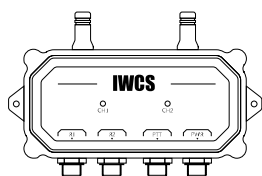
DISPOSAL

When disposing of iriBridge-2R and related equipment, it must happen in accordance with applicable national law.

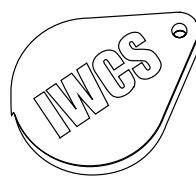
02 · INSTALLATION

Unboxing

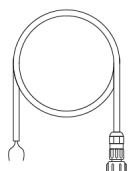
2.1 In the box



1 × iwiBridge-2R



1 × Magnet



1 × Power cable



1 × User manual

02 · INSTALLATION

Installation

2.2 Tools

Before installation please prepare the following tools:

- Tape
- 4.5 mm drill bits (for machine screws) or 3.2 mm drill bits (for wood screws)
- Drill
- Screws

2.3 Screws and screw holes

When mounting the iriBridge-2R, it is essential to consider the material and the appropriate drill bit size. Please note the following guidelines:

WOOD SCREWS

- 2 × 4 mm screws
- Drill 3.2 mm holes

MACHINE SCREWS

- 2 × 4 mm screws
- 2 × locking bolts
- 2 × washers
- Drill 4.5 mm holes

2.4 Installation

- 1 Find a flat surface for mounting your iriBridge-2R. Make sure that the antennas are not positioned close to reflecting metal surfaces (e.g. aluminum, steel, carbon fiber).
- 2 Drill 2 × holes (4.5 mm or 3.2 mm depending on type of screw).
- 3 If mounted in a very bumpy/shaky location, mount iriBridge-2R on shock mounts.
- 4 Seal the holes with non-toxic industrial silicone.

2.5 Mounting surface

If the iriBridge-2R is mounted on a conducting material (e.g. aluminum, steel, carbon fiber), it is very important that it is mounted so the antennas stay clear of the conducting material to ensure the best signal coverage. Failure to do so will cause poor signal at the cost of range.

2.6 Mounting hole distance

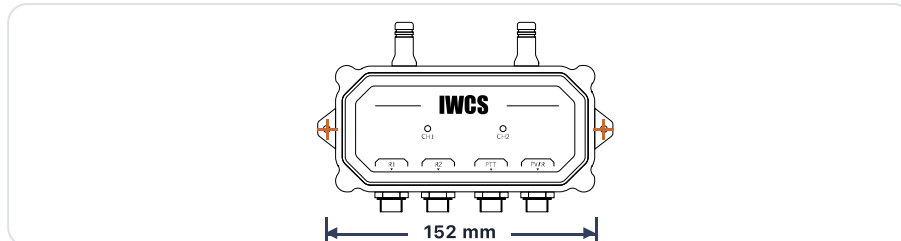


FIG. 01 — CENTER-TO-CENTER DISTANCE BETWEEN SCREW HOLES

Operation

3.1 Main description

Dual Digital Access Point: iriBridge-2R is a digital audio link between two wireless headsets, like iriComm 4.0 or 3rd party headsets/earpieces, with two optional external radio integrations and PTT controls.

3.2 Setting up

Connect the power cable to a suitable 5-24 VDC power outlet. The iriBridge-2R will power on automatically, and after a few seconds both indicator LEDs will begin flashing green.

Connect the radio interface cable(s) to the radio(s). These cables are sold separately and are specified by the user to match the particular radio model being used.

3.3 Wiring

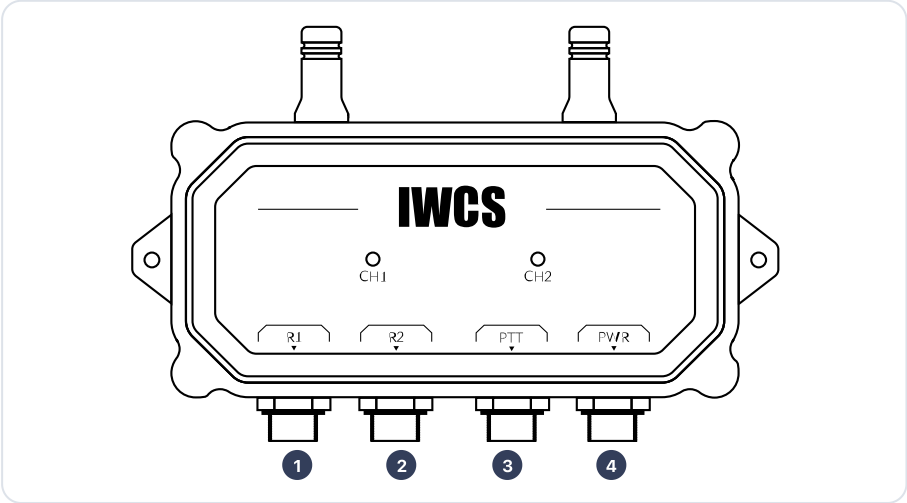
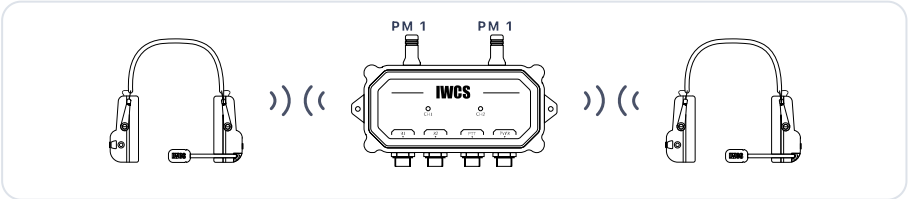


FIG. 02 — WIRING OVERVIEW

- 1 Radio #1 2 Radio #2 3 PTTs — open ended 4 5-24 VDC power

3.4 Pairing headsets

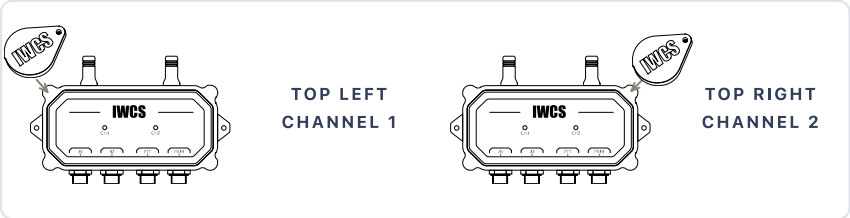
Before you can use your iriBridge-2R, you must pair it with one or two suitable headsets — one at a time. Preferably, the headset(s) should allow local volume control, as the iriBridge-2R does not perform any volume control. Each channel is put into pairing mode with the magnet: place it on the **top left corner for Channel 1**, or on the **top right corner for Channel 2**.



PM = PAIRING MODE

PAIRING MODE #1 — HEADSET

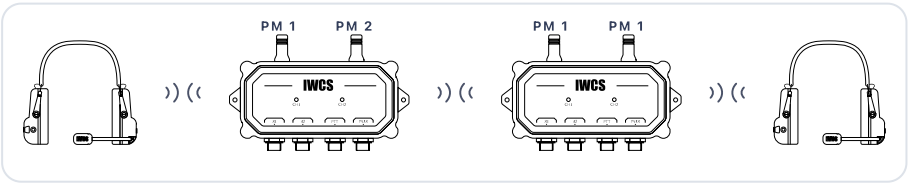
- 1. Put your headset into pairing mode.
- 2. With power on, the status indicator blinks slowly **green**. Place and hold the provided magnet on the top left corner (Channel 1) or the top right corner (Channel 2). The indicator turns solid **blue** — hold until it turns **green**, then remove the magnet immediately.
- 3. The iriBridge-2R is now in pairing mode #1 and blinks fast **blue**, changing to a slow **blue** blink once connected to the headset.



Power on — green (slow)	
Pairing mode #1 — blue (fast)	
Connected — blue (slow)	

3.5 iriBridge-2R to iriBridge-2R

iriBridge-2R can also function as a wireless link between, for example, two vessels, each equipped with an iriBridge-2R. This is achieved by setting one channel on the first iriBridge-2R to Pairing Mode #1 and one channel on the second iriBridge-2R to Pairing Mode #2.



PM = PAIRING MODE

PAIRING MODE #2

- 1. With power on, the status indicator blinks slowly green.
- 2. Place and hold the provided magnet on the top left corner (Channel 1) or the top right corner (Channel 2). The status indicator turns solid blue, then green, and then blinks blue in fast sequences of two (blue-blue ... blue-blue) — remove the magnet as soon as you see this sequence.
- 3. The iriBridge-2R is now in pairing mode #2 and blinks fast green, changing to a slow blue blink once connected.



Power on — green (slow)	
Release magnet — blue (2-blink bursts)	
Pairing mode #2 — green (fast)	
Connected — blue (slow)	

It is also possible to connect a cellphone to one of the wireless channels on the iriBridge-2R. In this case, Pairing Mode #2 should be used for the connection.

3.6 LED indicators

When using an iriComm 4.0 headset or a compatible 3rd party headset with two dedicated PTT buttons, the LEDs on the iriBridge-2R will show which radio is being transmitted on.

When transmitting on radio #1, Channel 1 (CH1) lights up steady green for the duration of the transmission and returns to slow blinking blue after PTT release. The same applies to radio #2, indicated on Channel 2 (CH2).

If no radio is detected on radio interface #1 or #2, the corresponding LED (CH1 or CH2) lights up steady red.

TX INDICATION

TX on radio #1 — CH1 steady green

PTT released — CH1 blue (slow)

TX on radio #2 — CH2 steady green

PTT released — CH2 blue (slow)

No radio detected — CH1/CH2 steady red

3.7 External antennas

The iriBridge-2R is fitted with two 2.4 GHz antennas mounted directly on the SMA connectors. For extended range, the standard antennas can be switched out for external antennas connected via antenna extension cables — ideal when the iriBridge-2R is mounted in a location with poor signal coverage (e.g. near conducting materials or below deck).

Unscrew the standard antennas from the SMA connectors, connect the extension cables, and mount the external antennas in a position with a clear line of sight.

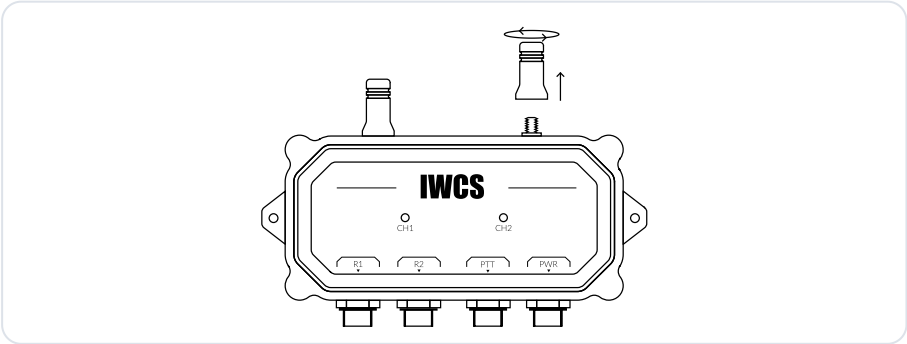


FIG. 02 — UNSCREW THE STANDARD ANTENNA FROM THE SMA CONNECTOR

Please note: the antenna connectors on the iriBridge-2R are **SMA female**. The extension cable must therefore have an **SMA male** connector at the iriBridge-2R end.



FIG. 03 — EXTENSION CABLE AND EXTERNAL ANTENNA



Disclaimer: The waterproof rating of the iriBridge-2R as delivered depends, among other things, on the O-ring seated in the base of the supplied standard antennas. If you choose to retrofit an external antenna or an extension cable, this waterproof seal is lost and the connection must be re-sealed. IWCS disclaims all responsibility for this re-sealing and for any damage to the product resulting from antenna replacement and the resulting loss of waterproofing.

04 · SERVICE AND MAINTENANCE

Service and maintenance

4.1 Troubleshoot

PROBLEM	CAUSE	ACTION
No light in LED indicators	Power cable not plugged in · cable defective · iriBridge-2R is defect	Check power source Check power cable
Red light indication	Other failure	Restart the system. If the problem persists, replace iriBridge-2R
No audio	Paired device too far away (Lost connection) · iriBridge-2R defect	Move paired device closer · replace iriBridge-2R

For other troubles — contact your local dealer support.

4.2 Cleaning

Do not use chemicals or solvents to clean your iriBridge-2R. Use only fresh water. Pressure, friction, sharp objects, etc. can damage the product and the warranty may be void.

4.3 Warranty

iriBridge-2R is covered by a two (2) year warranty.

4.4 Service / upgrades

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

4.5 Maintenance

If your IWCS iriBridge-2R has been exposed to saltwater, chemicals or any other solvents/liquids, immediately rinse with fresh water and wipe with a dry cloth.

4.6 · TECHNICAL SPECIFICATIONS

Weight	370 g *
Dimensions	L169 x W33 x H68 mm **
Radio	2.4 GHz
Waterproof	IP67
Temperature range	−30 °C to +60 °C
Power	5 – 24 VDC
Antenna connectors	2 x SMA Female
Radio integration	Yes — 2 x independent "Smart" connections
External PTT	2 x — PTT 1+2 ***
Intercom	Full duplex — always open
LOS range: iriBridge-2R to iriComm 4.0	>50 m ****
LOS range: iriBridge-2R to iriBridge-2R	>500 m ****

PART NUMBER — IRIBRIDGE-2R

IR-12-0200-01

01

*Without cables
**Without cables, antenna connectors and antennas
***External PTT sold separately
****Test results and methodology are available upon request

iriBridge-2R is developed, designed
and manufactured by

IWCS ApS

**Hejrevang 13
3450 Allerød
Denmark**

+45 43 43 26 26

**info@iwcs.eu
www.iwcs.eu**

