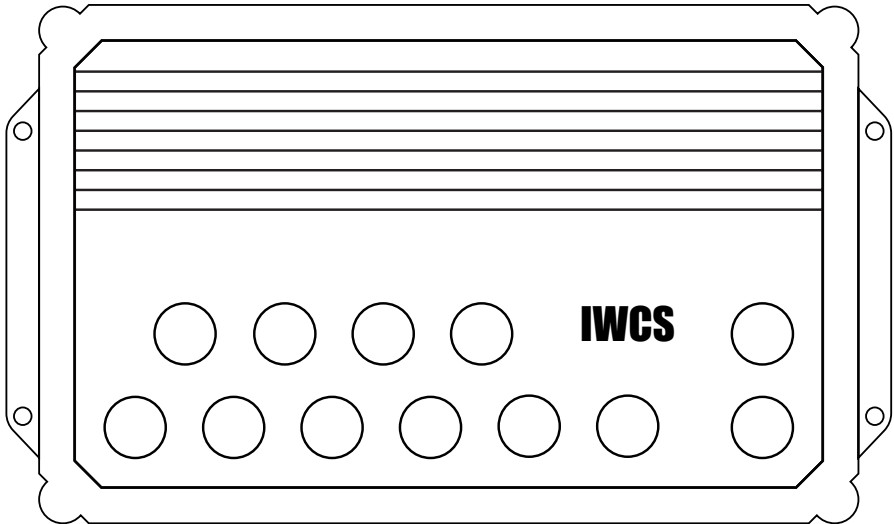




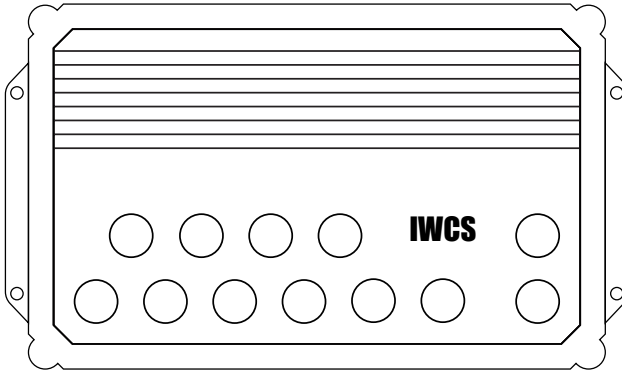
User manual



iriSound

CONGRATULATIONS ON YOUR NEW PRODUCT FROM
IRIDIUM WATERPROOF COMMUNICATION SYSTEMS

IriSound



**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 IriSound WILL BE A
RELIABLE PARTNER FOR MANY YEARS TO COME.**

**THOMAS B SVENNINGSEN
CO-FOUNDER OF IWCS**

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4 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

IriSound is a Trademark by Iridium Waterproof Communication Systems ApS.

Revision	Release date	Release note
1.1	19-03-2024	General Revisit
1.2	14-01-2025	iriSound MKII

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**

IriSound is CE and UKCA 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 IriSound 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 IPX7). 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**

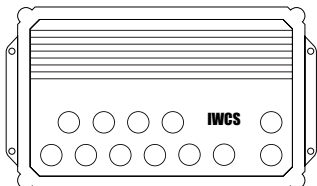
When disposing of IriSound and related equipment, it must happen in accordance with applicable national law.



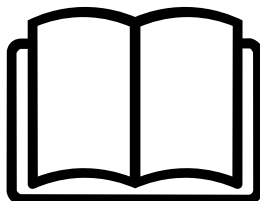
6 Unboxing

2.1 In The Box

1 x IriSound



1 x User Manual



3.1 General Information

iriSound - The heart of all communication

The importance of clear and uninterrupted communication can not be underestimated. In many cases it is what separates success from failure. Weather conditions, surrounding noise, distance to co-workers – all factors potentially making clear communication difficult or impossible.

The iriSound system combines your existing VHF/UHF radios with a state-of-the-art, waterproof inter-com system enabling clear and trouble-free communication under the most demanding conditions.

iriSound is a highly advanced audio unit that processes all sound signals to and from external units whether they are headsets, external radio units or iriBoost/iriStore.

The built-in intelligence allows for easy plug-and-play installation when used with other Iridium products – like the iriConnect for wireless headset communication. iriSound's rugged, cast aluminium enclosure and the IP67-rated connectors offer a fully waterproof exterior construction designed specifically for the harsh conditions onboard small and medium sized vessels, with ability to install it either inside or out-side.

The electronics design is based on the newest 24bit/48kHz Digital Signal Processing (DSP) technology, which offers superior sound quality and a world of software features such as dynamic noise reduction, user controlled voice groups etc.

3 iriSound VERSIONS - ONE WILL FIT YOUR NEEDS

iriSound is available in various configurations matching your specific needs, while allowing for future extensions of functionality should your requirements change.

The basic unit offers 4 audio channels, which can be configured freely between wired/wireless headsets and external radios.

All iriSound Version can be interfaced with iriSelect.

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Mounting

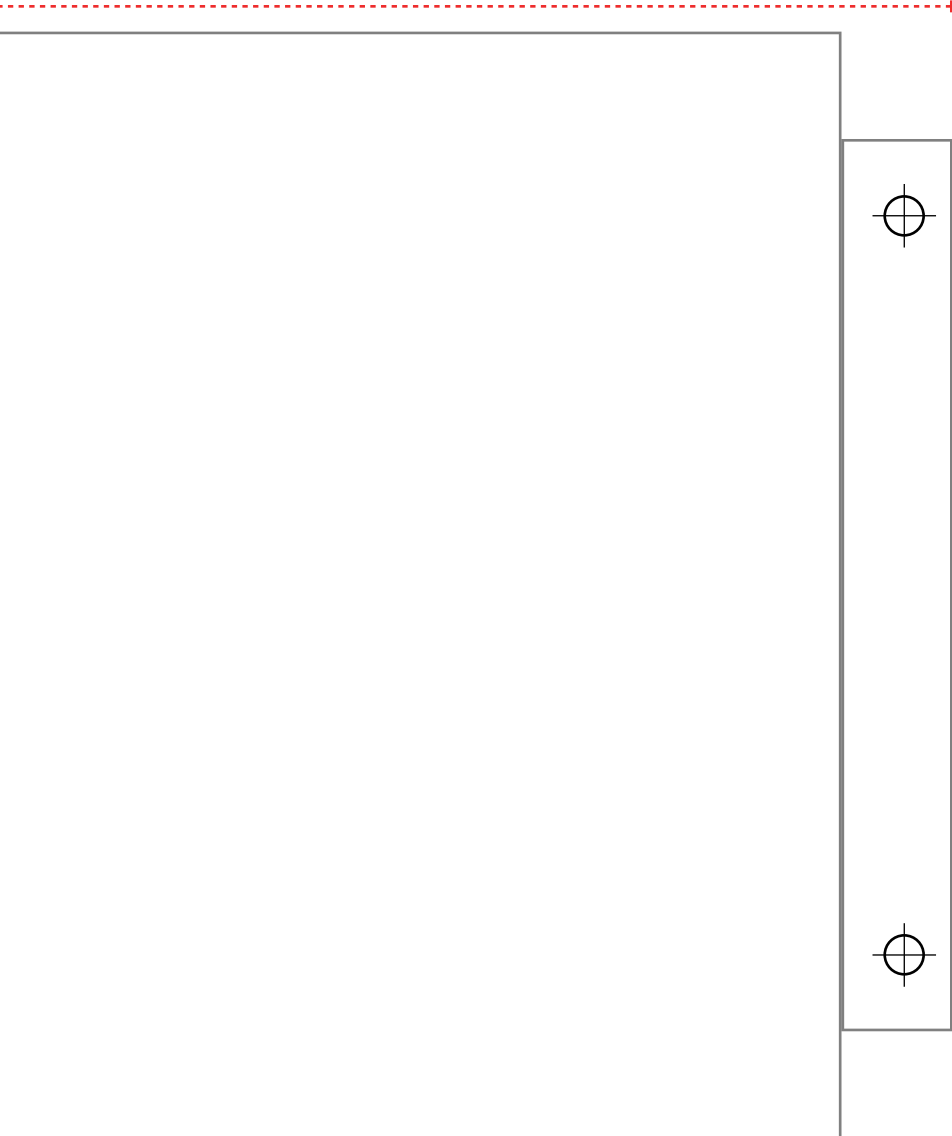
3.2 Drill template

252 mm

Dia. 5,5 mm



252 mm



148 mm

Backside of drille template

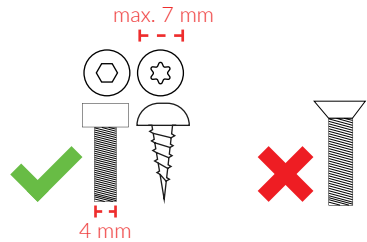
Backside of drille template

12 Mounting

3.2 Tools

Before installation please prepare the following tools:

- Tape
- 4,5 or 3,3 mm drill bits
- Drill
- Screw heads may not exceed 7 mm
- Silicone based sealant



3.3 Installation

When mounting the Headset Interface, 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.

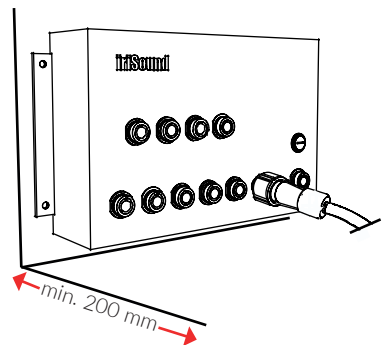
If you are using machine screws you will need:

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

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

3.2 Clear space

When installing the iriSound, it's important to maintain a minimum clearance of **200 mm** from the mounting surface to allow space for cables.



3.2 Connections

Power Cable

The power cable is delivered with a ferrite. The ferrite is mounted to provide RF immunity to iriSound.

Connect the power cable to a 12 VDC power source / switch.

The iriSound is protected by a 3,15 amp fuse, and require no further fuse.

Data Cable

All external units connected to iriSound, are connected via Channel 1 to 4 / 1 to 6 / 1 to 8

When connecting the Data cables, align the two dots on iriSound connectors and cable connectors, respectively. Carefully plug in the connector and turn the bajonet clockwise.

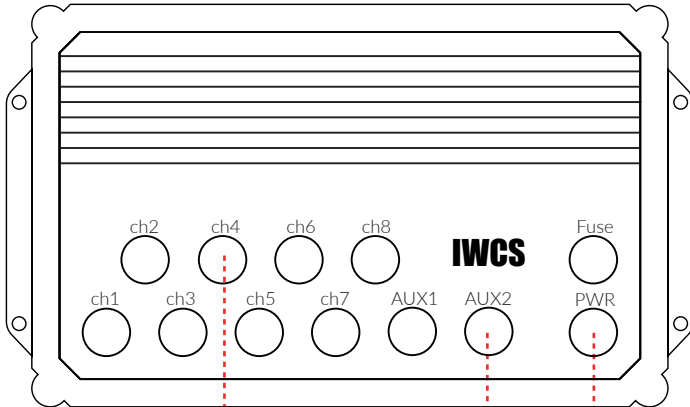
DO NOT BEND the cables more than instructed on the drill template (page 8/9)

The data cables must be installed according the relevant installation guide (Marine / Car / Truck)

Status LED

iriSound has a LED indicator, flashing GREEN when powered on. If any hard ware failure occurs the LED will flash RED. If the failure is momentarily, the RED indication can be reset by switching OFF and ON the iriSound. If the LED indicator stays RED, the iriSound is defect and must be repaired. Consult your dealer. DO NOT OPEN the iriSound yourself. Unauthorized opening will void the warranty.

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



Channels 1-8 (Audio/data)

- iriConnect
- Headset Interface
- Radio Interface

AUX 1/2

- iriBoost
- iriSelect
- iriSelect Black Box
- iriStore

Power

- 12 VDC

5.1 Specifications

DSP Mixer	irisound 4	iriSound 6	iriSound 8
Audio/data channels	4	6	8
AUX ports	2		
Weight	500 g		
Size	230/250 x 145 x 50/65		
Waterproof	IP67		
Power	12 VDC / 300mAh	12 VDC / 450mAh	12 VDC / 600mAh
Temperature range	-20 C to +65 C		
Frequency range	20 - 20.000 Hz		
Part number	IR-14-0200-01	IR-16-0200-01	IR-18-0200-01

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

Headset Connection Panel 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 iriSound has been exposed to saltwater, chemicals or any other solvents/liquids, immediately rinse with freshwater and wipe with a dry cloth.

iriSound
is developed, designed and
manufactured by

IWCS Aps

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