



IWCS IR-14-0200-02 iriSound External Radio Interface User Manual

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IWCS IR-14-0200-02 iriSound External Radio Interface



INTRODUCTION

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

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TRADEMARK ACKNOWLEDGEMENTS

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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 warning 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 certified as stated in the Declaration of Conformity which is accessible on request.

- **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**

In the event of a power outage, iriSound will turn off and will automatically restart when power is restored.

Power interruptions limited to iriSound will not affect other electronic components. 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 IP68). To create and maintain its water-proof integrity it has been assembled in a controlled environment using special equipment. This unit is NOT a user maintainable unit, and under no circumstances should the unit be opened except by authorized personnel. Unauthorized opening of the unit will invalidate the warranty. (For warranty see page 14)

- **INSTALLATION AND SERVICE**

Installation and general service must be done by skilled service personnel only.

- **DISPOSAL**

When disposing of iriSound and related equipment, they must be in accordance with applicable national law. There are no batteries inside iriSound.

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.

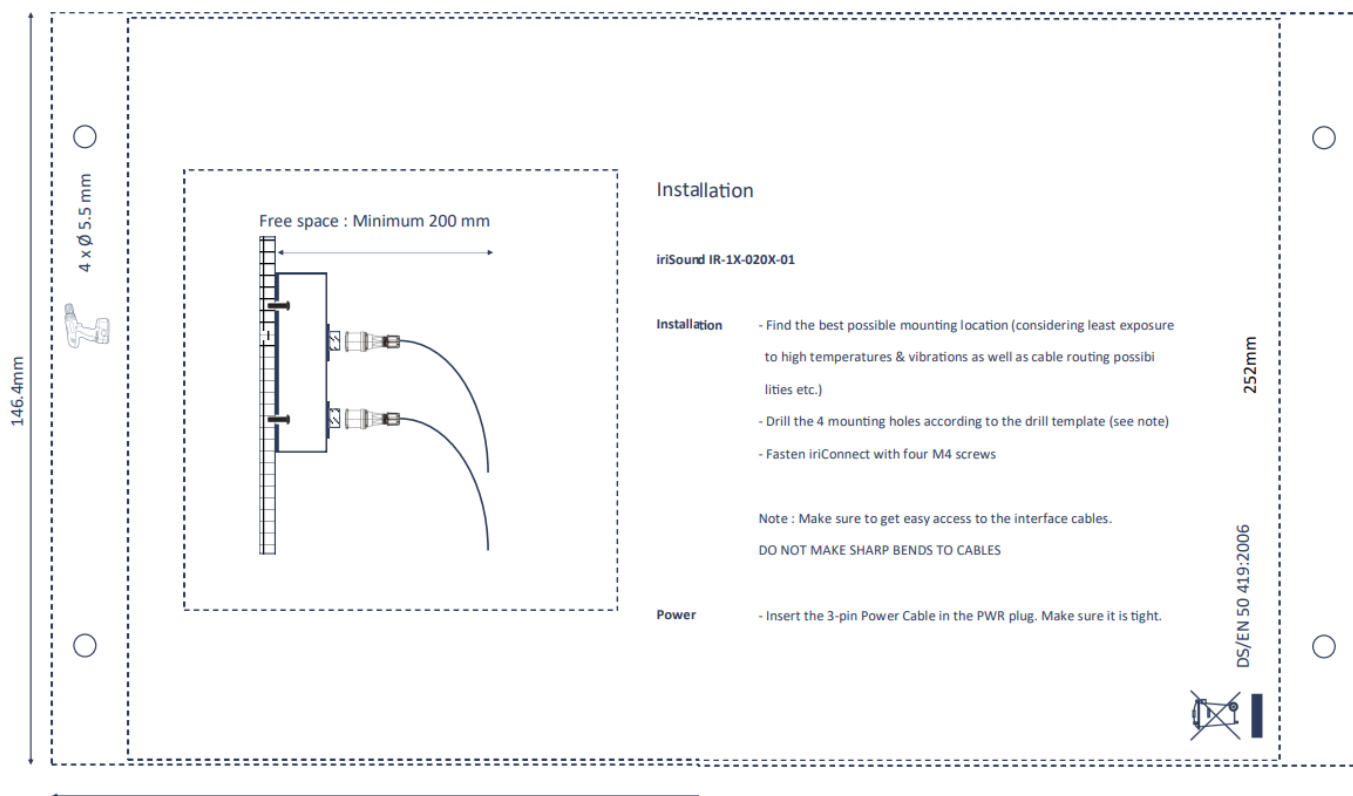
The built-in intelligence allows for easy plug-and-play installation when used with other Iridium products – like the iriConnect for wireless headset communication. iriSound's rugged, cast aluminium enclosure and the IP67-rated connectors offer a fully waterproof exterior construction designed specifically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

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.

Drill template iriSoouund



UNBOXING

The following items are included in the delivery of your new iriSound from IWCS

- iriSound
- User manual
- Power Cable – ordered separately in the desired length

TOOLS

The tools mentioned below are need for installation.

- 4,3 mm drill for machine screws or 3,2 mm drill for self tapping screws
- Power drill
- Screwdriver and spanner (depending on type of screw)
- 4 x M4 machine screws, 4 x 4,0 mm washer, 4 x M4 nuts in stainless steel or 4 x M4 self tapping screws

INSTALLATION

MOUNTING IRISOUND

Use the Cutting Template below (Fig.1), to secure the area for mounting. Fasten the template, with tape, to the desired surface. Drill 4 x holes (4,3 mm or 3,2 mm depending on type of screw) Drill the center hole with a 22,0 mm hollow drill. Seal the holes with industrial silicone, meant for the environment, the iriSound is mounted.

CONNECTIONS

PRECAUTIONS

- **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. 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.

OPERATION

MAINTENANCE

iriSound is mounted in a fixed position and has no moving parts. Make sure that the surroundings of iriSound stays within the guided temperature range and make sure the power terminals are dry and clean. No further maintenance is required.

TROUBLESHOOT

PROBLEM	CAUSE	SOLUTION
<ul style="list-style-type: none">▪ iriSound does not turn ON	<ul style="list-style-type: none">▪ Power cable not plugged in▪ Voltage missing or low▪ Cable defective▪ Fuse broken	<ul style="list-style-type: none">▪ Plug in Power cable▪ Check power source▪ Change another cable▪ Change fuse (3,15 Amp)

SPECIFICATIONS

Specifications	iriSound 4, 6 & 8
Model	IR-14-0200-02/IR-16-0200-02/IR-18-0200-02
Width	250 mm
Depth	75 mm
Height	150 mm (without cables)
Weight	1.000 g
Enclosure material	Aluminium
Temp. range	-20 to +65
Water-resistance	IP 67—Designed for maritime use above surface
Technology	Dual processor system with an extremely powerfull 400MHz DSP. CH1-8: 24bit/48kHz, AUX1-2: 12bit/16kHz. Distributed bus system for remote monitoring and control of external units.
Software features	Dynamic audio routing tables, Variable audio compression, Adaptive wind noise reduction. Customized DSP code available. Future-proof though SW upgradeable features.
Power supply, Fuse	12 – 18 V DC / 5x20mm – F3.15A
Power Consumption	< 4.0 Amp—actual power consumption depends on external equipment attached to ports
Power	Powered by iriSound
Interface	IWCS Data Bus
Release	May 2015

CLEANING / MAINTENANCE

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

WARRANTY

iriSound is covered by a limited warranty. A two (2) year full warranty *


SERVICE / UPGRADES

Any Service or additional Upgrades must be handled by IWCS Do not try to open or modify the IWCS product.
Call our Hot-Line at +45 43 43 26 26 or send us an email at

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Documents / Resources

	IWCS IR-14-0200-02 iriSound External Radio Interface [pdf] User Manual IR-14-0200-02, IR-16-0200-02, IR-18-0200-02, IR-14-0200-02 iriSound External Radio Interface, IR-14-0200-02, iriSound External Radio Interface, External Radio Interface, Radio Interface, Interface
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References

-  [Waterproof Intercom Solutions - IWCS - Heavy Duty Intercoms](#)