

User Manual

SERVICE / UPGRADES

Any Service or additional Upgrades must be handled by IWCS

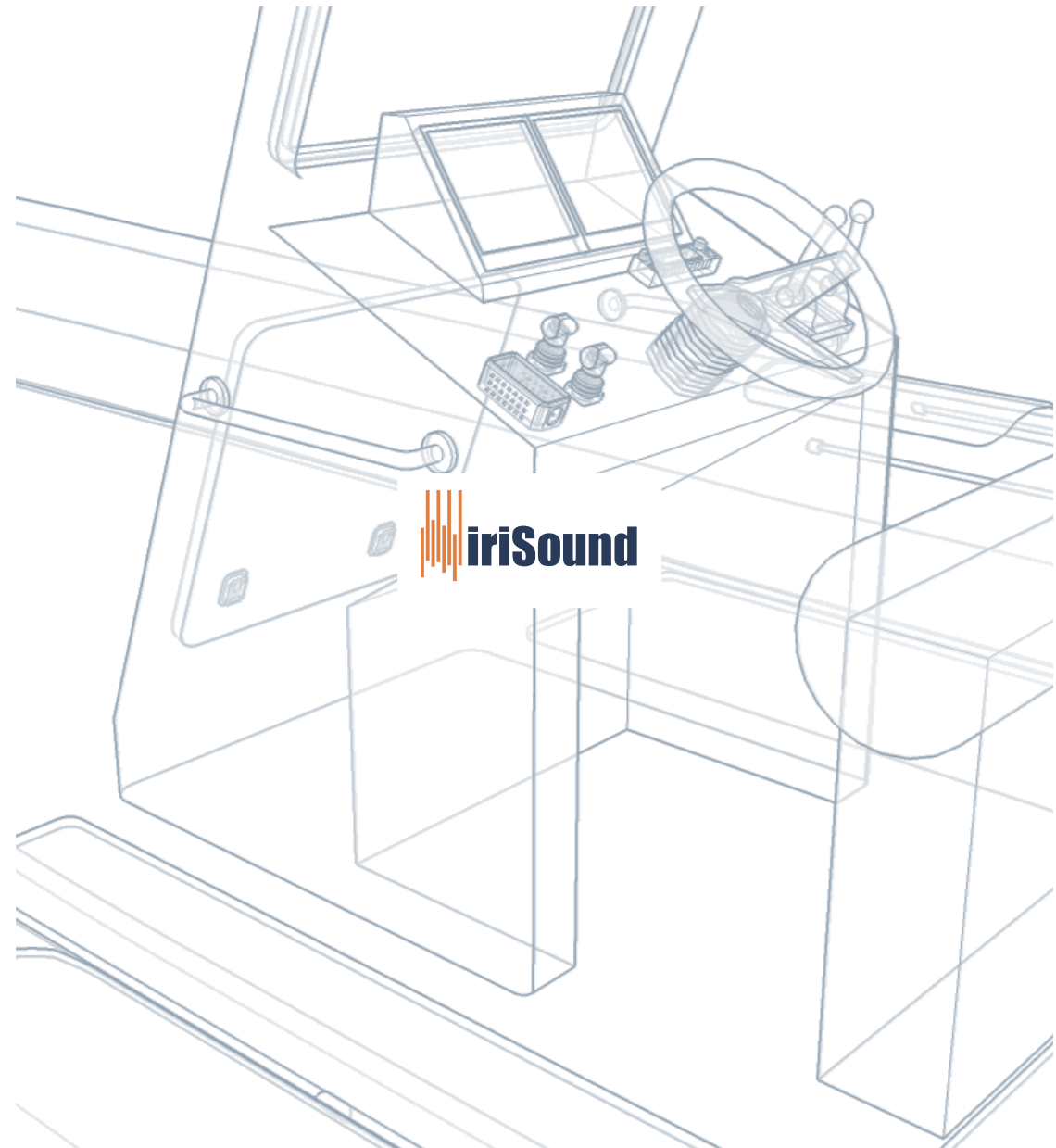
Do not try to open or modify the IWCS product

Call our Hot-Line at +45 43 43 26 26 or send us an email at support@iwcs.eu

IRIDIUM WATERPROOF COMMUNICATION SYSTEMS APS

PORTHUSVEJ 7A - 3490 KVISTGAARD - DENMARK

+45 43 43 26 26 - WWW.IWCS.EU - INFO@IWCS.EU



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 AC-
CORDING TO THIS MANUAL,
IRISOUND WILL BE A RELIABLE PART-
NER IN MANY YEARS TO COME.*



THOMAS B SVENNINGSEN
CO-FOUNDER OF IWCS



3.3 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 *



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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

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1.3 TRADEMARK ACKNOWLEDGEMENTS

iriSound is a Trademark by Iridium Waterproof Communication Systems ApS

3.1 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.

3.2 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 inVoltage missing or lowCable defectiveFuse broken	<ul style="list-style-type: none">Plug in Power cableCheck power sourceChange another cableChange fuse (3,15 Amp)

2.6 CONNECTIONS

PRECAUTIONS

Power Cable	<p>The power cable is delivered with a ferrite. The ferrite is mounted to provide RF immunity to iriSound.</p> <p>Connect the power cable to a 12 VDC power source / switch.</p> <p>The iriSound is protected by a 3,15 amp fuse, and require no further fuse.</p>
Data Cable	<p>All external units connected to iriSound, are connected via Channel 1 to 4 / 1 to 6 / 1 to 8</p> <p>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.</p> <p>DO NOT BEND the cables more than instructed on the drill template (page 8/9)</p> <p>The data cables must be installed according the relevant installation guide (Marine / Car / Truck)</p>
Status LED	<p>iriSound has a LED indicator, flashing GREEN when powered on. If any hardware 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.</p>

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 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 waterproof integrity it has been assembled and 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.

2.1 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 intercom 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.

2.3 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

2.4 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

2.5 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.

BACKSIDE OF DRILL TEMPLATE

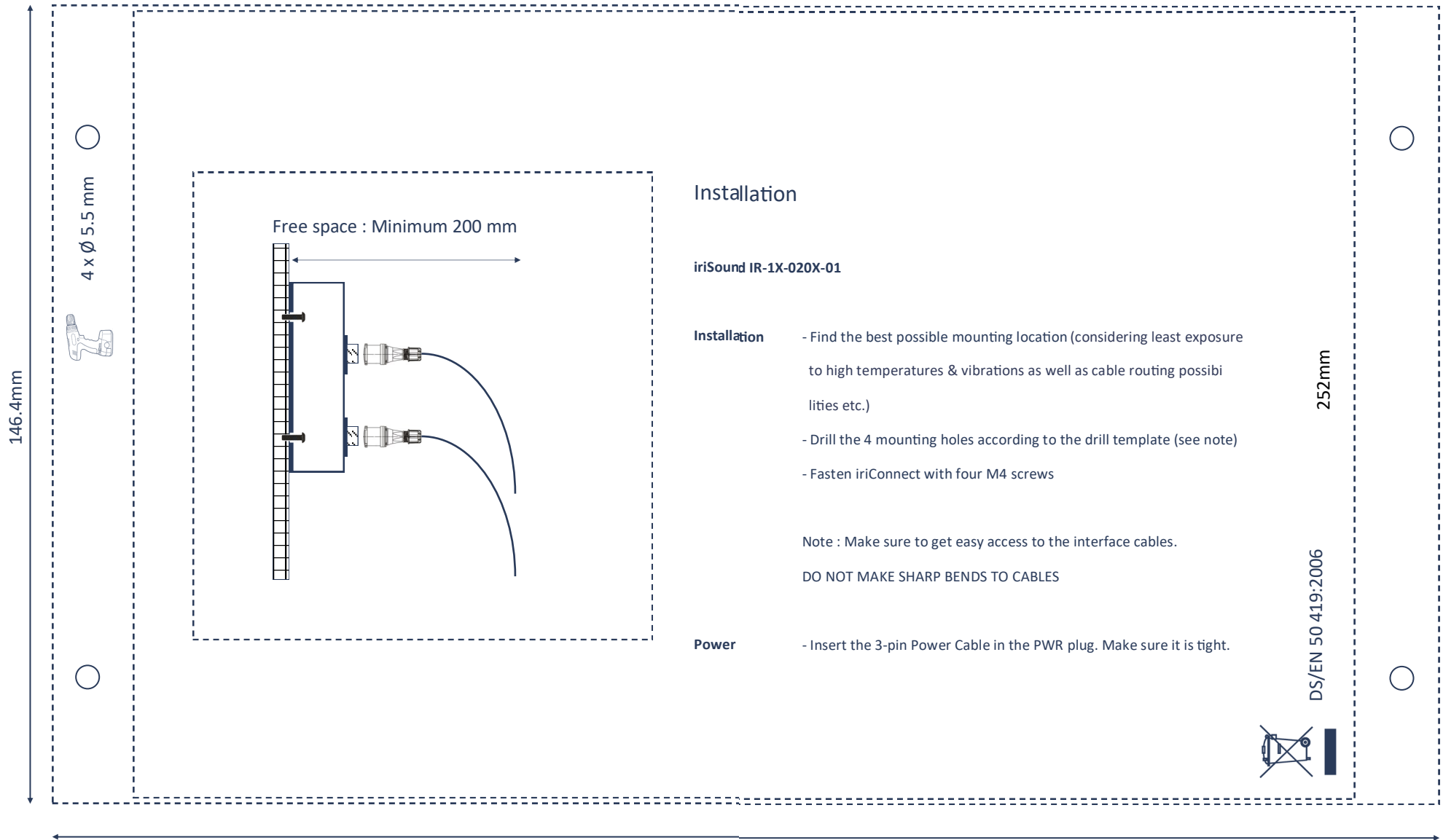


BACKSIDE OF DRILL TEMPLATE



Drill template

iriSound



Installation

iriSound IR-1X-020X-01

- Installation**
- Find the best possible mounting location (considering least exposure to high temperatures & vibrations as well as cable routing possibilities etc.)
 - Drill the 4 mounting holes according to the drill template (see note)
 - Fasten iriConnect with four M4 screws

Note : Make sure to get easy access to the interface cables.

DO NOT MAKE SHARP BENDS TO CABLES

- Power**
- Insert the 3-pin Power Cable in the PWR plug. Make sure it is tight.

252mm

DS/EN 50 419:2006

