

Intelligent
Intercom

iriSound Solutions



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Intelligent Intercom

The importance of clear and uninterrupted communication at sea can not be underestimated. In many cases it is what separates success from failure. Weather conditions, surrounding noise, distance to coworkers - 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 the iriVision camera documentation system. 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 aluminum 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 freedom 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 like dynamic noise reduction, user controlled voice groups etc., some of which are offered as additional features.

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. The most advanced version offers 10 audio channels and an LCD display allowing for user configurable features.

DSP Audio

State Of
The Art

Key features:

- Up to 8 audio/intercom ports for crew-members or external radios
- 2 AUX ports for connection of external equipment like iriSelect, iriVision or iriStore Mini
- 400MHz DSP core delivering impressive sound quality at 24bit/48kHz sampling
- Advanced noise cancelling/muting feature
- Preconfigured side tone suppression
- Fully waterproof design
- Built-in power supply noise filter
- Power supply 12VDC/2A



Interfaces

A World Of Options

IWCS Interface units extend Hear-Through mode (Situational Awareness) is always an available option in the wireless version of iriComm 3.0. In the cables versions it depends on

iriConnect

iriConnect HFP-AG is a wireless interface used with our iriComm 2.0 / 3.0 headsets.

iriConnect has besides the Audio Channel also the ability of data, which allow the PTT function directly from the headset, whether the radio is an integrated part of a larger intercom system.

Headset Interface

In some use cases you may want to avoid a wireless connection between **iriSound** and your headset. For this purpose we give you **iriHS**, which enables connecting a wired headset (**iriComm** or **iriInsert**) to an **iriSound** system.

The **iriHS** communicates with **iriSound**, and the build-in amplifiers and digital volume control allows you to adjust the volume to exactly the desired level, and the non-volatile memory will make sure your setting is remembered for next time the system is started.



iriSelect

Make your own grids

iriSelect

iriSelect provides a control and status interface for the iriSound intelligent intercom system.

From iriSelect you can activate the transmit function of up to 4 connected radio systems

iriSelect also acts as status display for the entire iriSound system, and indicates failure states like missing wireless connections.

The mode switch selects one of up to 10 preset audio routing schemes (modes), which is instantly sent to iriSound.

Radio Interface

IWCS External Radio Interface facilitates simple audio integration of external radios (or other audio sources) with your iriSound waterproof intercom system.

The External Radio Interface is configurable to work with any commercially available radio as long as it has an external audio and PTT interface.

iriBelt

iriBelt is a pocket-size wireless transceiver predominantly used in connection with iriInsert for wireless intercom using Gecko marine safety helmets. iriBelt can also be used with 3rd party headsets or, in special cases, a waterproof in-ear headset.

iriBelt supports one primary and one secondary wireless connection. When used in a full-duplex intercom setup, the primary connection is used for the intercom. The secondary can be paired with a cell phone or a hand-held radio, or it can simply be left unpaired.



System Integration by IWCS



Headset - Wired
Passive headset
Connection to Headset Interface



Gecko Helmet - Wireless
iriInsert mounted in helmet
Curly lead to iriBelt
Bluetooth connection to iriConnect



IWCS Helmet - Wireless
All integrated in the earcup
Bluetooth connection to iriConnect

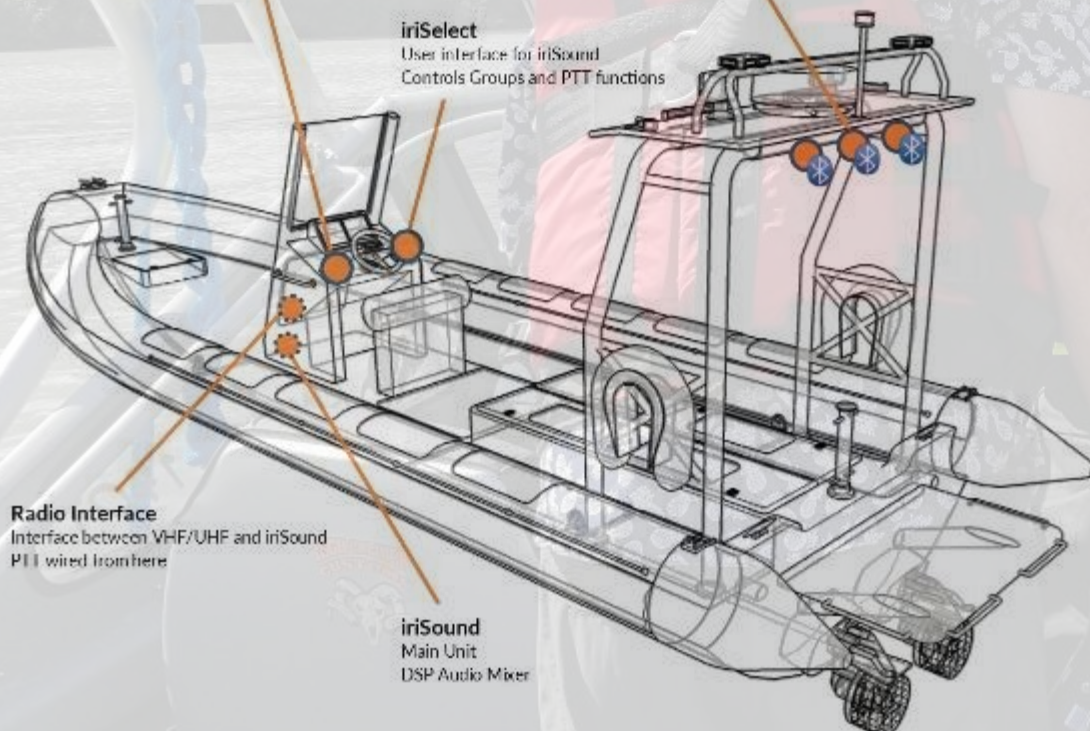


Headset - Wireless
All integrated in the earcup
Connection to iriConnect

Headset Interface
Connection box and Volume Control
For Wired iriComm headsets

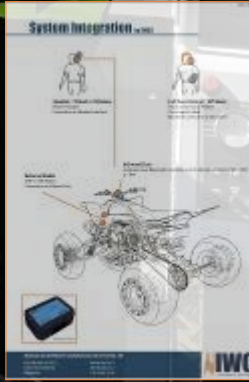
iriConnect
Bluetooth interface to iriComm

iriSelect
User interface for iriSound
Controls Groups and PTT functions



Radio Interface
Interface between VHF/UHF and iriSound
PTT wired from here

iriSound
Main Unit
DSP Audio Mixer



Specifications

iriSound
4,6 or 8 way

IWCS Category	DSP Audio Mixer
Partnumber	IR-1X-0200-02
Waterproof	IPX7 (MIL IPX8)
Audio Features	Integrated DSP 16 bit Stereo Codec 48 kHz DAC Wide Band Speech
Connects to	iriConnect iriSelect iriHS IWCS Radio Interface
Size	250 x 150 x 70
Weight	800 g



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