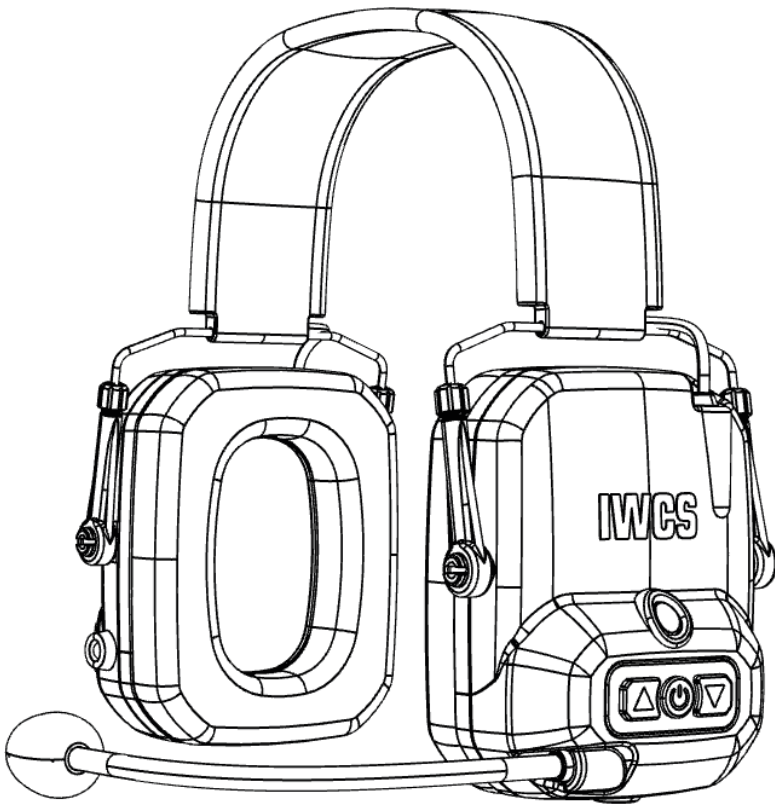




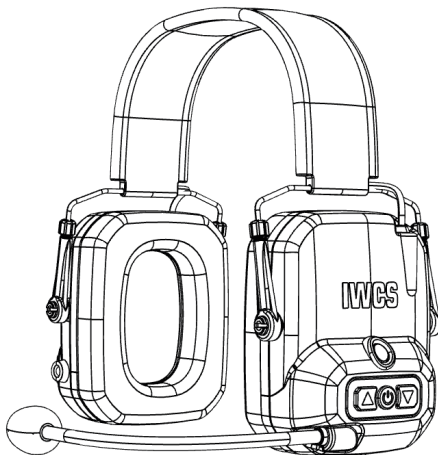
User manual



iriComm 4.0
Wireless

CONGRATULATIONS ON YOUR NEW PRODUCT FROM
IRIDIUM WATERPROOF COMMUNICATION SYSTEMS

iriComm 4.0



WIRELESS HEADSET

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.

iriComm 4.0 WILL BE A RELIABLE PARTNER FOR MANY YEARS
TO COME.

THOMAS B SVENNINGSEN
CO-FOUNDER OF IWCS

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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

2024 Iridium Waterproof Communication Systems ApS. All right reserved.
Printed in Denmark.

1.3 Trademark acknowledgements

iriComm 4.0 is a Trademark by Iridium Waterproof Communication Systems ApS.

Revision	Date	Description
1.0	29-11-2023	
1.1	01-02-2024	Adress changed
1.2	12-02-2024	Changed Features / General Revisit




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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**
iriComm 4.0 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**
In the event of a power outage, iriComm 4.0 will turn off and will automatically restart when power is restored. Power interruptions limited to iriComm 4.0 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 iriComm 4.0 and related equipment, it must happen in accordance with applicable national law. There can be batteries in iriComm 4.0 (wireless versions and some wired versions)

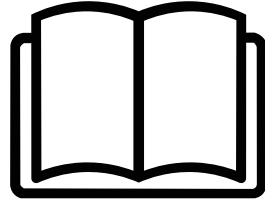
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2.1 What's in the box

1 x iriComm 4.0 headset



1 x User Manual



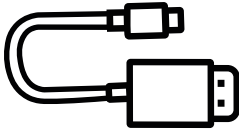
1 x IWCS Windmuff Kit



1 x IWCS Bandana



1 x Charging Cable



1 x 2 ml of Molykote 44
Medium Silicone Grease



3.1 Intro

iriComm 4.0 Wireless is a multifunctional communication tool, which lets you handle several connections at the same time.

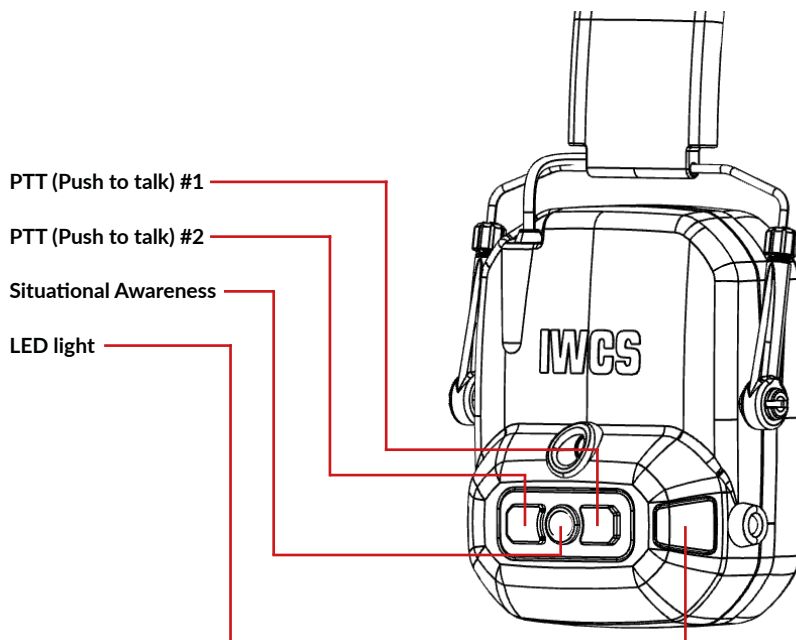
As part of an iriSound intercom system:
iriComm 4.0 is paired with an iriConnect as the primary connection.

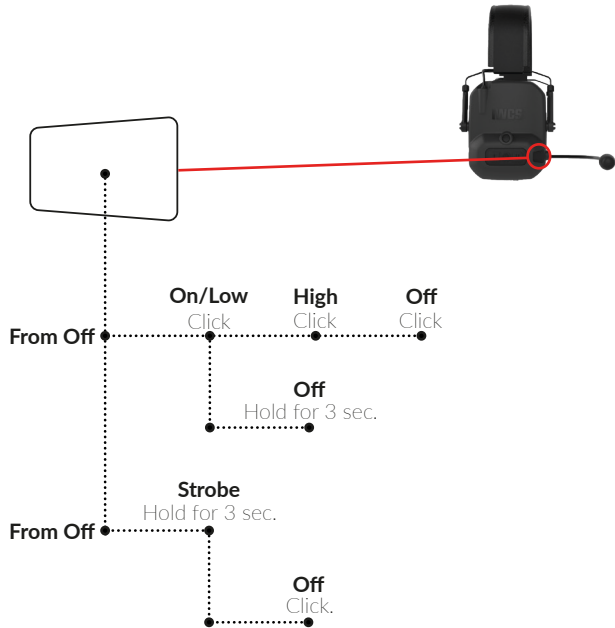
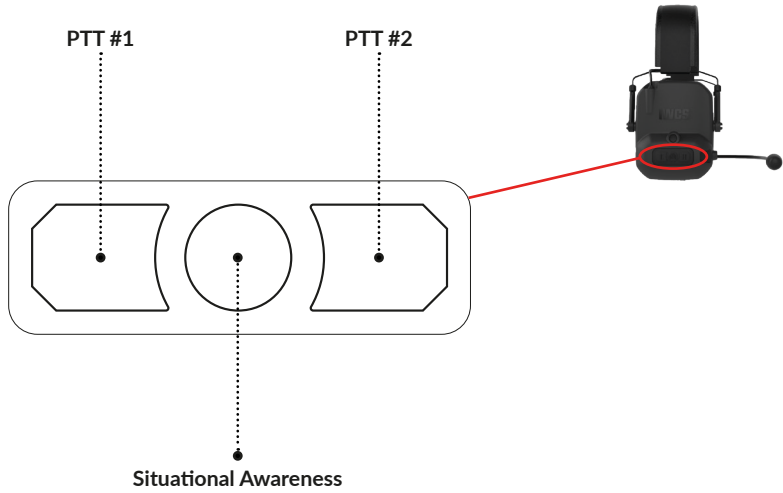
In a pier to pier (P2P) setup :
iriComm 4.0 paired with another iriComm 4.0. This gives the possibility for 2 persons to be in Full Duplex Intercom without using an iriSound Audio Mixer.
In addition to any of the above mentioned use cases, the iriComm 4.0 can be paired with a mobile phone, allowing the user to answer incoming phone calls.



3.2 Buttons and Functions

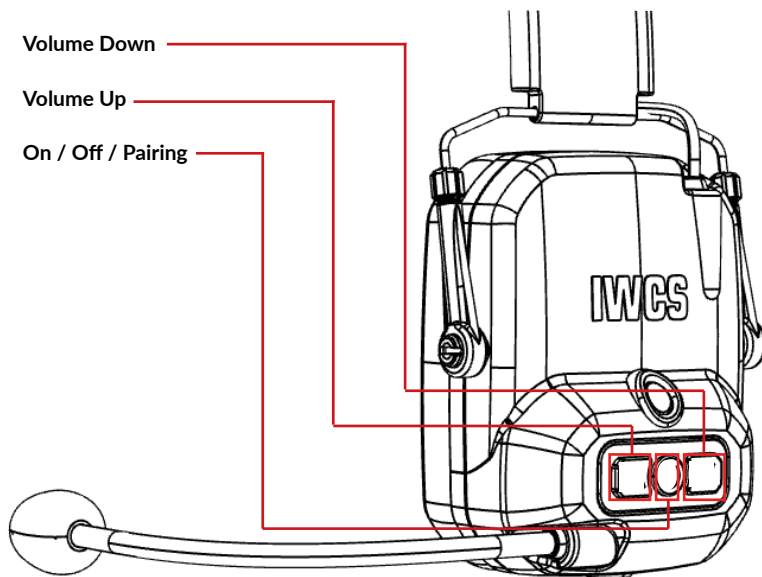
Right Earcup

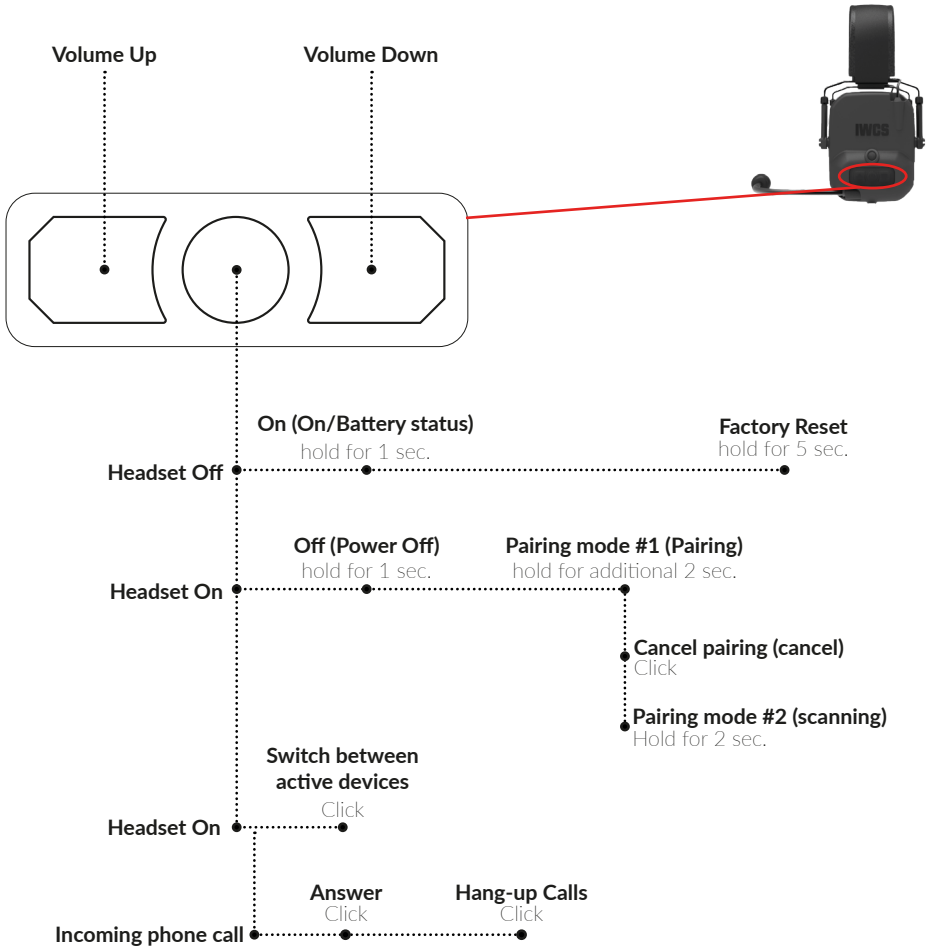




3.3 Buttons and Functions

Left Earcup Buttons

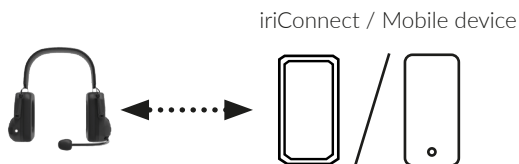




3.4 Pairing the headset

Pairing #1

Connecting to iriConnect



Prior to initiating the pairing process between your headset and iriConnect, it's essential to ensure that there are no other wireless devices in pairing mode nearby. Your headset should be the sole device actively searching for pairing. This precaution will help to prevent any interference or conflicts during the pairing procedure.

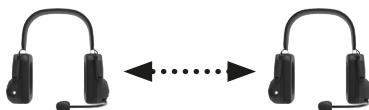
1. Activate pairing mode on your iriConnect device by following the instructions in the iriConnect user manual.
2. Place your iriComm 4.0 into pairing mode #1, see page 12.

Connecting to mobile device

1. Place your iriComm 4.0 into pairing mode #1 See page 12.
2. From your phone, locate visible wireless units - Choose "iriComm 4.0" to connect.
3. iriComm 4.0 will respond with a voice command.

Pairing #2

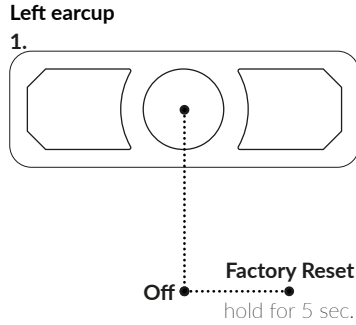
Headset to Headset pairing



1. Activate pairing mode on your first iriComm 4.0 device by following the instructions on page 12.
2. Place your second iriComm 4.0 into pairing mode #2 as shown on page 12.

3.5 Factory Reset

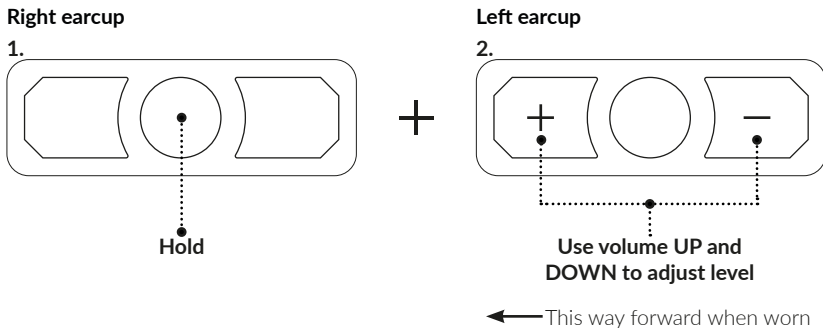
Performing a factory reset on your iriComm 4.0 will completely restore all settings to their original factory defaults. This includes the need to re-pair it with your iriConnect or mobile device. A factory reset can be beneficial if you are experiencing difficulties with your connections.



3.6 Situational Awareness level

To adjust your situational awareness level, press and hold the middle button on your right earcup while using the volume up and down buttons on your left earcup. This allows you to modify your situational awareness level accordingly.

To store the set level, press and hold the middle button on your right earcup for 3 sec.



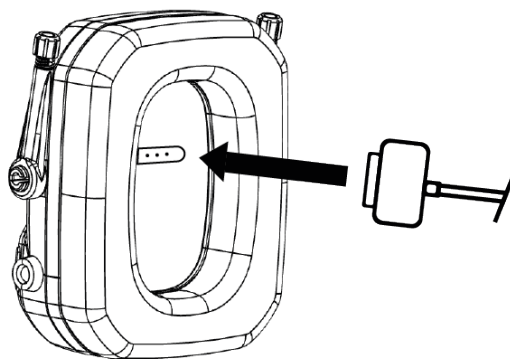
3.7 Charging

The iriComm 4.0 wireless headset, along with some wired PLUS versions, features an advanced battery and charging circuit. The headset is equipped with a Lilon battery that offers an extended operational time.

Upon powering on the headset, a Voice Prompt will indicate the current battery status, with messages such as "Battery High" (80-100%), "Battery Medium" (20-80%), or "Battery Low" (10-20%). When the battery level drops to approx 10%, a message "Battery Critical" will be heard. From "battery critical" you will typically have less than 30 min. of use time left.

Charging the headset involves placing the magnetic connector into the bottom of the right earcup. Upon connecting the charging plug, the battery begins to charge. Throughout the charging process, the red Status LED will light. Once the battery is fully charged, the yellow Status LED will light.

The headset should be turned OFF prior to starting the charging process.



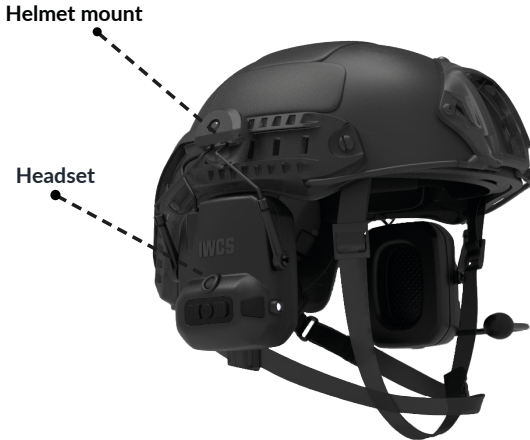
Note: See page 19 regarding protection and maintenance of the charging connector.

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Helmet

4.1 Helmet mount

The brackets on the iriComm 4.0 are designed to fit a semi-standard 88 mm size for helmet mounts. This size is commonly used and widely available, making it easy to find suitable helmet mounts that can securely hold the iriComm 4.0 headset in place.



Supported helmets

Team Wendy EXFIL SAR

OPS Core SAR

Future Safety Manta

Many other helmets supported - consult your dealer or IWCS for advice



Bracket

Mark Rail

OPS Core Bracket

FS bracket + IWCS universal bracket



IWCS part number

UT-MKIT-TWRail

UT-MKIT-ARCRail

FS-HS-BRCKT + SG-IC-0001



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5.1 Microphone

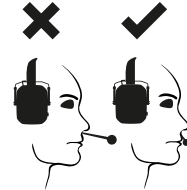
For optimal performance place the microphone at a distance of less than 1 cm in front of your mouth. The noise cancelling, directional microphone is a very sensitive component, and must be placed in the right position for optimal performance. Underneath the wind muff there is a flat surface indicating which side must point towards your mouth.



Use the right wind muff



talk into the flat side of the mic



Keep the mic so close to the mouth you can kiss it

5.2 Earpads

The earpads can be replaced if needed. Please order our hygiene kit through your local dealer. To maintain the warranty of your product we strongly recommend that you let your authorized dealer do this for you.

set of two

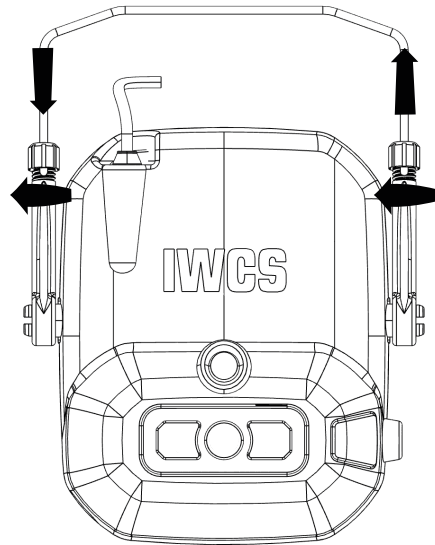
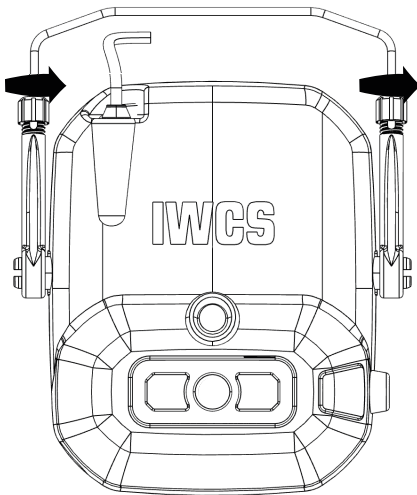


5.3 Swivelamrs

The swivel arms on the headset are designed to be adjusted for a proper fit. It is essential to adjust them to ensure a comfortable and secure wearing experience. When properly adjusted, the earcups should cover your ears completely, leaving no gaps. This ensures optimal sound isolation and a snug fit for enhanced communication performance. Take the time to adjust the swivel arms to achieve the best fit for your individual comfort and communication needs.

1. Loosen the tension by turning the nuts on the swivel arm.

2. After loosening the nuts, you can adjust the earcups up and down according to your preference. Remember to tighten the nuts after making adjustments.



6.1 Maintenance

Do not use chemicals or solvents to clean your iriComm 4.0 headset. Use only a damp cloth, and cold/lukewarm freshwater and wipe/rinse carefully the visible surfaces on your iriComm headset. Replace the microphone windmuff if it has absorbed salt crystals or in any other way is marked by salt. Let the microphone dry out totally, before installing a new windmuff.

Do not flush fresh water directly into the speaker openings. Rinse carefully. The speaker is a fragile component.

When the headset is clean and salt residue and dirt removed, let the headset dry with the speakers facing downwards allowing for water to run out.

Pressure, friction, sharp objects, etc. can damage the product and the warranty may be void. If the headset is not in use for a longer period of time, remember to charge the battery every 6 months to extend battery life.

The charge connector is gold plated and require a minimum of maintenance. Salt crystals must be removed to secure full connection. Remove with cold/lukewarm water, and dry with a cotton swab or soft tissue. Apply a thin layer of acid-free silicone based lubricate to protect the conductive gold surface. Molykote 44 medium is available from your IWCS dealer.

To maintain hygiene standards, the earpads and the inside of the headband must be wiped with a non-alcoholic antibacterial swipe.

After wet use, the headband must be dried completely to extend the life of the stitches. The windmuff must be removed after wet use. Flush and dry the windmuff.

6.2 Cleaning

Daily Cleaning and Storage

To ensure a long lifespan for your iriComm 4.0 headset, regular cleaning and maintenance are essential.

After a day of use, it is recommended to wipe the headset with a damp cloth to prevent the buildup of salt crystals over time.

If the windmuff is wet, it is crucial not to squeeze the water out while it is still on the microphone. Doing so may force the water into the microphone, potentially causing damage or even rendering it inoperable. This action could void the warranty. Instead, remove the windmuff from the microphone, gently squeeze out the water, and allow it to dry completely before reattaching it.

After cleaning your headset, make sure to let it dry thoroughly. To facilitate effective drying, position it in a way that allows proper airflow around the cleaned areas. Hanging it on a wall or any suitable surface can be a good option for this purpose.

Deep Cleaning

If your headset has been fully submerged in water, it's important to follow these steps to prevent potential defects.

Please note that the iriComm 4.0 headset holds an IP67 rating while being worn. This rating indicates that if the headset becomes fully submerged underwater while not being worn, water might penetrate the earcups. However, this should not cause damage to your headset if it's properly cleaned afterward.

If water has penetrated into your earcups, regardless of whether the headset was worn or not, please clean it as described below.

1. Remove the foam from inside the earcup. This can be easily done by pinching it and pulling it out from the earcup.
2. Drain any remaining water and gently dry the inside of the earcup using a soft tissue or cloth removing any salt and water residue.
3. Allow your headset to thoroughly dry before reinserting the foam into the earcups.

6.3 Cleaning Disclaimer

Regular maintenance and cleaning of your IWCS products are essential to ensure their optimal performance and longevity. Failure to clean and maintain your devices as instructed in the provided manuals may lead to functional issues, damage, or reduced lifespan.

Please follow the recommended cleaning procedures outlined in the user manual provided with your IWCS products. These instructions are designed to assist you in maintaining the quality and reliability of your devices. If you have any questions or concerns about the cleaning process, please don't hesitate to contact our customer support team for assistance.

IWCS shall not be held responsible for any defects, malfunctions, or adverse effects resulting from inadequate or improper cleaning practices. Your proactive care and adherence to our cleaning guidelines are crucial in ensuring the continued satisfaction and performance of your IWCS products.

6.4 Troubleshoot

Problem	Cause	Action
Headset will not start up (Wireless versions only)	-Battery level too low	-Charge battery
Headset will not start up (Wired versions only)	-Radio battery low -Cable defect	-Charge Battery -Send for repair
Headset will not Pair (Wireless versions only)	-Pairing failure	-Perform a Master Reset
"Device Connected" fails (Wireless versions only)	-Initialization failure	-Turn OFF and Turn ON the headset
TX audio is too low	-Microphone is twisted -Windmuff soaked	-Turn microphone into right position -Replace windmuff
Excessive noise on TX audio	-Windmuff too small -Windmuff damaged	-Mount bigger Windmuff -Replace windmuff
Hear Through is too low or too high	-Wrong settings	-Adjust volume

6.5 LED indicator inside earcups

Right Earcup:

RED LED - Constand light = Charging



GREEN LED - Constand light = Fully Charged



Left Earcup:

GREEN LED - Flashing every second = ON



BLUE LED - Flashing every second = Connected to iriConnect / Mobile Device



BLUE LED - Flashing 2 times every second = Incomming sound



7.1 Specifications

iriComm 4.0 wireless	Headband	Helmet
Radio	Wireless 2.4 GHz	
Weight	375 g	305 g
Waterproof	IP67	
No. of PTTs	2	
3-Mode LED	Yes	Yes
Situational Awareness	Yes	Yes
Battery	430 mAh Li-Ion Rechargeable and replacable	
Charging	USB	
Inductive charge time	< 3 hours	
Gel earpads	Standard	
SNR	> 25dB	
Frequency range	100 - 8000 Hz	

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manufactured by

IWCS Aps

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