



LYDIA™ Wireless Headset HS01BT

User Manual

Version: 1.6
Date: July 2024

Lydia™
VOICE

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Table of Contents

1 Introduction	6
2 Getting Started	7
2.1 Battery Insertion	7
2.2 Battery Extraction	8
2.3 Turn Wireless Headset HS01BT ON/OFF	8
2.4 Bluetooth Pairing	8
3 Adjust Settings	11
3.1 LED Lights and Audio Outputs	11
3.2 Position the Microphone Boom	12
3.3 Adjust the Headband	13
3.4 Headband Disassembly	13
3.5 Install Pop Filter and Ear Cushion	14
3.6 Microphone Orientation	14
4 Troubleshooting	15
5 Cleaning and Maintenance	17
5.1 Battery Safety Guidelines	17
6 Miscellaneous	19
7 Safety and Regulatory Information	20
Index	23

List of Figures

1.1 Overview Wireless Headset HS01BT	6
2.1 Overview Wireless Headset HS01BT	7
2.2 Battery Insertion	7
2.3 Battery Removal	8
3.1 Position the Boom	12
3.2 Adjust Headband	13
3.3 Headband Disassembly	13
3.4 Install Windscreen and Ear Cushion	14
3.5 Microphone Orientation	14

List of Tables

3.1 LED Lights and Audio Outputs	11
4.1 Troubleshooting	15
7.1 Safety and Regulatory Information	20

1 Introduction



Figure 1.1: Overview Wireless Headset HS01BT

The rugged LYDIA™ Wireless Headset HS01BT combines high-quality audio performance, environmental durability, and lightweight comfort without sacrificing stability during active use. Take the time to familiarize yourself with the Wireless Headset HS01BT. Refer to this user manual for further information and setup instructions.

2 Getting Started

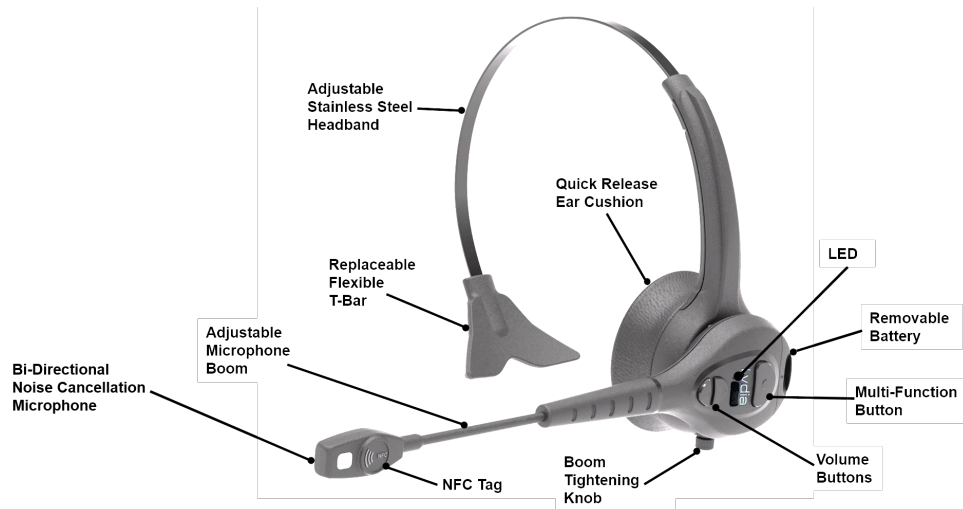


Figure 2.1: Overview Wireless Headset HS01BT

2.1 Battery Insertion



Note: Charge battery before first use. Refer to Wireless Headset HS01BT Charger User Manual.

1. Rotate microphone boom 45° degrees to stop position.
2. Insert battery into headset until firmly seated.

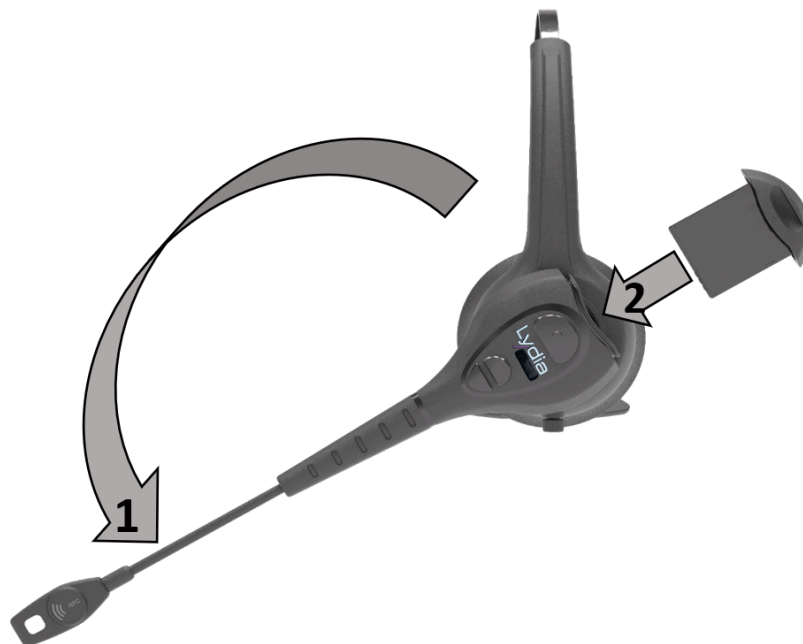


Figure 2.2: Battery Insertion

2.2 Battery Extraction

1. Rotate microphone boom 45° degrees to stop position.
2. Pull out battery from the headset module.

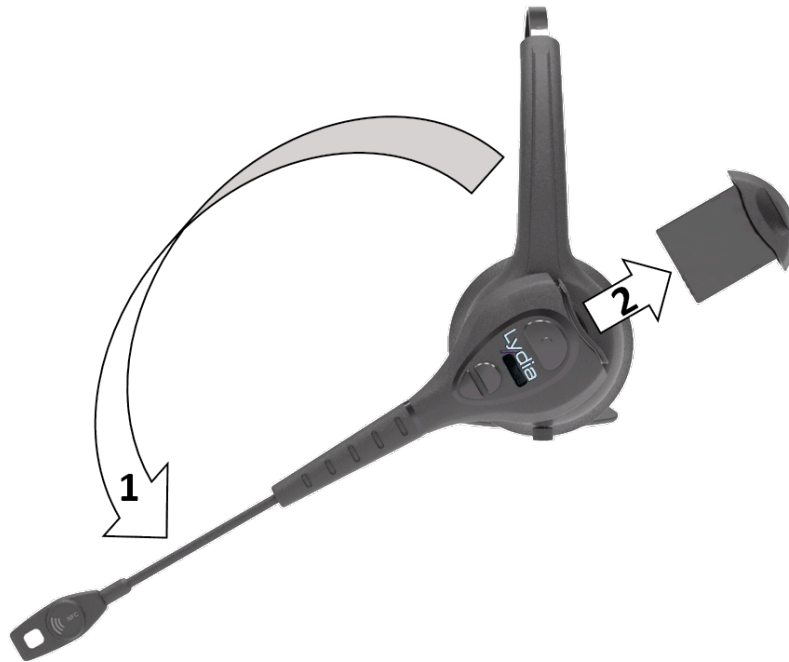


Figure 2.3: Battery Removal

2.3 Turn Wireless Headset HS01BT ON/OFF

- Turn Wireless Headset HS01BT ON by pressing the the Multi-Function button (MFB) for approx. 3 seconds
 - Confirmed with the audio response ¹: "Power ON" and a long beeping tone.
- Turn Wireless Headset HS01BT OFF by pressing the the Multi-Function button for approx. 3 seconds
 - Confirmed with the audio response ¹: "Power OFF"

2.4 Bluetooth Pairing

There are three options to pair the Wireless Headset HS01BT via Bluetooth with host devices:

¹Audio response depends on selected language.

- Standard Bluetooth pairing where the Wireless Headset HS01BT is discovered by the host.
- Touch-to-Pair with hosts supporting an NFC Connection.
- Scan-to-Pair with hosts supporting Bluetooth Mac Address Scanning.

Select the preferred pairing method (above) and follow these steps subsequently to initiate bluetooth pairing

1. Position Wireless Headset HS01BT into close proximity of the host device until successfully paired.
2. Turn OFF Wireless Headset HS01BT by pressing the Multi-Function Button for approx. 3 seconds.

Standard Bluetooth pairing

3. Press the MFB for approx. 3 seconds until you hear "Pairing" and the LED alternately flashes red and blue.
4. Use the host's Bluetooth search and pairing functionality (refer to the Host documentation if necessary) and select "LYDIA Wireless Headset HS01". If necessary, enter four zeros (0000) for the passcode and accept connection.

Touch-to-Pair

3. Press the MFB for approx. 3 seconds until you hear "Pairing" and the LED alternately flashes red and blue.
4. Locate headset's NFC in the microphone assembly.
5. Touch headset's NFC tag with the host's NFC tag.

Scan-to-Pair

3. Press the MFB for approx. 3 seconds until you hear "Pairing" and the LED alternately flashes red and blue.
4. Activate host's scanning function and scan the headset's Bluetooth Mac Address Barcode Label.

On successful Bluetooth pairing the headset confirms the connection with:

- The audio response ¹ "Pairing Successful"
- Slowly flashing blue LED (2 second interval)

Once paired the headset and the host reconnect automatically every time they are powered ON and in proximity range:

- Two short ascending beep tones indicate successful reconnection.

Follow the aforementioned steps to pair the Wireless Headset HS01BT with a new host.



Note: When pairing to a new host the current bluetooth connection is lost.



Note: Refer also to the LYDIA™: VOXTER™ Bluetooth Pairing - Quick Guide for more information on Bluetooth pairing methods.

3 Adjust Settings

Adjust Language

Change Language by pressing Multi-Function Button (MFB) and Vol+ for 1 second. The selected language is confirmed with an audio response in the according language. Wireless Headset HS01BT supports the following languages: English, French, German, and Spanish.

i Note: This function can only be activated in standby or connected mode.

Microphone Un/Mute

Rotate the microphone boom up for microphone mute. Rotate the microphone boom down for un-mute.



i Note: This function can only be activated when the microphone is in use.


3.1 LED Lights and Audio Outputs

Primary Features	Headset Control	LED Light	Audio Outputs
Pairing	Powered OFF, Press MFB for approx. 6 seconds	Blue and Red Alternate Flash	"Pairing"
Pairing Complete	Automatic	Slowly flashing blue	"Pairing Successful"
Power ON/OFF	Press MFB for 3 Seconds	Blue/Red Flash 3 Times	"Power ON" long beep, "Power OFF"
Volume	Press Volume + or Volume - to Increase or Decrease Volume	No LED Output	< Increase Volume >Decrease Volume

Primary Features	Headset Control	LED Light	Audio Outputs
Connected	Automatic	Slowly flashing blue	Two short ascending
Microphone Un/Mute	Rotate boom up for mute, rotate boom down for un-mute.	No LED Output	N/A
Change Language	Press MFB and Vol+ for 1 second	No LED Output	"English selected" ¹
Not Connected	Automatic	Blue Solid	N/A
Link Lost	Automatic	Red blinking	Two short beeps
Low Battery Warning	Automatic	Red Flash Twice Every 2 Seconds	"Low Battery"
Low Battery Shut-down	Automatic	Red Flash 3 Times	4 Descending beeps

Table 3.1: LED Lights and Audio Outputs

3.2 Position the Microphone Boom

 Do **NOT** rotate the boom beyond the stop point.


 Applies to Mono and Binaural Model. The Behind-the-Neck model has only left side microphone boom placement.



Figure 3.1: Position the Boom

3.3 Adjust the Headband

The headband can be squeezed for a tighter or a looser fit to the head. The stainless steel head band clicks as it is lengthened or shortened into a comfortable position. When adjusting the headband:

- Position the ear cushion in the center of the ear.
- Position the T-Bar above the opposite ear, half way between the top of the ear and the top of the head.



Figure 3.2: Adjust Headband

3.4 Headband Disassembly

1. Loosen the boom tightening knob turning it clockwise
2. Remove Bluetooth Headset Module from Headband Module



Figure 3.3: Headband Disassembly

3.5 Install Pop Filter and Ear Cushion



Figure 3.4: Install Windscreen and Ear Cushion

3.6 Microphone Orientation

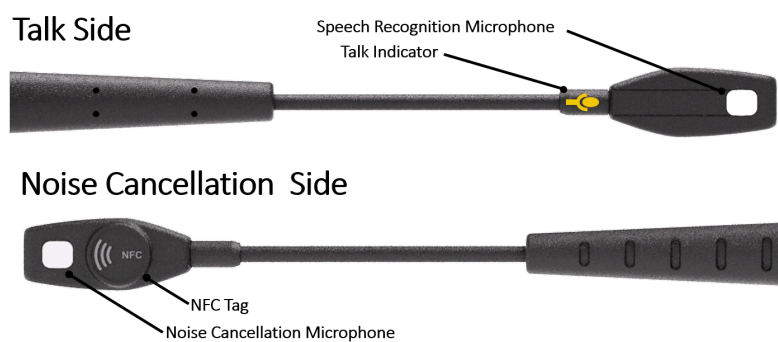


Figure 3.5: Microphone Orientation

4 Troubleshooting

Operation	Problem	Possible Solution
Operating	Headset does not turn ON.	<ul style="list-style-type: none">■ Make sure battery is fully seated in headset.■ Make sure battery is fully charged.
Pairing	Pairing unsuccessful.	<ul style="list-style-type: none">■ Make sure headset is turned OFF before pairing.■ Make sure intended Bluetooth host device is switched ON.■ Make sure headset is located within 30 cm (12 in) of intended Bluetooth host device.■ Make sure to select "LYDIA Wireless Headset" on the host device's Bluetooth search menu.
	Headset appears to be paired but unable to communicate with intended Bluetooth host device.	<ul style="list-style-type: none">■ Check if headset is connected to different Bluetooth host device.■ Make sure headset is located within 30 cm (12 in) of intended Bluetooth host device.■ Make sure all other non-intended Bluetooth host devices are 2 m (6 ft) away from headset.■ Turn OFF headset and restart pairing process (see section Section 2.4).
Charging Battery	Battery does not charge. Charger LED light OFF when battery is inserted.	<ul style="list-style-type: none">■ Make sure battery is inserted correctly.■ Check power cable connection to charger.■ Battery may be faulty. Replace Battery.

Table 4.1: Troubleshooting

5 Cleaning and Maintenance

To maintain the LYDIA™ Wireless Headset HS01BT Headset we suggest the following guidelines:

- Do **NOT** expose the Wireless Headset HS01BT to harsh chemicals or cleaning agents.
- The battery must be fully inserted and locked into place in order for the Wireless Headset HS01BT to become waterproof according to IP67 standard. Do **NOT** immerse the Wireless Headset HS01BT in water beyond 1 meter (3 feet) for more than 30 minutes.
- Clean the Wireless Headset HS01BT with a soft damp cloth if necessary. Do **NOT** use soap, cleaning fluids or chemicals.
- Keep dust, dirt and debris from the battery slot and the battery charger slots.
- Keep the battery contacts free of dirt, grease, oil and other substances that can affect the battery's proper connection.
- Battery contacts must be covered with protective sleeve to prevent short circuit and discharge after the battery is removed from the headset.

5.1 Battery Safety Guidelines

- Clear battery charging area of debris and combustible materials or chemicals. Improper battery use increases the risk of a fire, explosion, or other hazard.
- Make sure while charging the battery and charger temperatures lie between 5°C – 35°C (41°F – 95°F).
- Do **NOT** use incompatible batteries or chargers. Use of an incompatible battery or charger increase the risk of fire, explosion, leakage, or other hazard. Refer to your distributor customer support for further information about compatibility of battery or charger.
- Do **NOT** disassemble, open, crush, bend, deform, puncture, or shred the battery.
- Severe impact from dropping any battery-operated device on a hard surface can cause the battery to overheat.
- Do **NOT** short circuit the battery or allow metallic or conductive objects to contact the battery terminals. Use the supplied protective battery sleeve when battery is removed from headset.
- Do **NOT** modify or remanufacture, attempt to insert foreign objects into the battery, immerse or expose to water or other liquids, or expose to fire, explosion, or other hazard.
- Do **NOT** leave or store the battery in or near areas that tend to get very hot, such as in a parked vehicle, near a radiator or other heat source.

- Do **NOT** place battery into a microwave oven, conventional oven, toaster oven, washer, dryer, dishwasher, or other mechanical devices.
- Battery usage by children should be supervised.
- Please follow local regulations to promptly dispose of used batteries.
- Do **NOT** dispose of batteries in fire.
- Seek medical attention immediately if a battery was swallowed.
- In the event of a battery leakage, do **NOT** allow the liquid to come in contact with the skin or eyes. If contact is made, wash the affected area with large amounts of water and seek medical attention.
- If you suspect damage to your headset or battery, contact your distributor customer support to arrange for inspection.





6 Miscellaneous






EU directive on the disposal of waste electrical and electronic equipment (WEEE, Waste Electrical and Electronic Equipment) All components must be returned for recycling at the end of their service lives.

This symbol on the product or on its packaging indicates that this product must **NOT** be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal helps to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. mo

7 Safety and Regulatory Information

	<p>Warnings for use of Wireless Devices.</p> <p>Please observe all warning notices with regard to the usage of wireless devices.</p>
	<p>Potentially Hazardous Atmospheres – Vehicles Use.</p> <p>You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles (such as grain, dust, or metal powders) and any other area where you would normally be advised to turn off your vehicle engine.</p>
	<p>Potentially Hazardous Atmospheres – Fixed Installations.</p> <p>You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles (such as grain, dust, or metal powders).</p>
<ul style="list-style-type: none"> • Contains small parts which can be a choking hazard. 	
<ul style="list-style-type: none"> • Not suitable for children under age 3. 	
<ul style="list-style-type: none"> • This product contains magnets which can be harmful to pacemakers, or similar medical devices. 	
<ul style="list-style-type: none"> • To reduce the risk of fire or electrical shock, do not expose the product to rain or moisture. 	
<ul style="list-style-type: none"> • As with any electronic products, use care not to spill liquids into any part of the system. Liquids can cause a failure and/or a fire hazard. 	
<ul style="list-style-type: none"> • Do not place any naked flame sources, such as lighted candles, on or near the apparatus. 	
<ul style="list-style-type: none"> • Use caution when using your headset while operating a vehicle or engaging in any activity that requires your full attention. Check and follow local laws regarding mobile phone and headset use. Some jurisdictions impose specific limitations, such as single earpiece configuration, on the use of such products while driving. 	
<ul style="list-style-type: none"> • Sounds that you rely on as reminders or warnings may sound different when using a headset. Be aware of how these sounds may vary in character so you can recognize them as needed. 	
<ul style="list-style-type: none"> • Do not leave a battery on prolonged charge when not in use. 	
CAUTION:	<p>Do not make modifications to the headset or accessories. Unauthorized alterations may compromise safety, regulatory compliance, and product performance and warranty.</p>
	<p>Listening to sound at high volumes may damage your hearing. Background noise, as well as continued exposure to high volume levels, can make sounds seem quieter than they actually are.</p>

<ul style="list-style-type: none"> • Use only with the supplied power supply meeting local regulatory requirements (ex. UL, CSA, VDE, CCC). 	
<ul style="list-style-type: none"> • Use caution when using a Headset while operating a motor vehicle or anywhere the inability to hear outside sounds may present a danger to you or others. 	
<ul style="list-style-type: none"> • The Wireless Headset HS01BT does not require scheduled cleaning. Should cleaning be necessary, simply wipe the outside surfaces with a soft damp cloth. 	
Regulatory Information	All topsystem GmbH devices are designed to be compliant with rules and regulations in the locations they are sold and are labeled as required. This regulatory information applies to model number HS01BT.
International	This device complies with internationally recognized standards covering human exposure to electromagnetic fields from radio devices.
	Wireless Device Country Approvals Regulatory markings, subject to certification, are applied to the device signifying the radio (s) is/are approved for use in the following countries: United States, Canada, and Europe.
NOTE	Europe includes Austria, Belgium, Bulgaria, Czech Republic, Cyprus, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.
	CE NOTICE TO USERS topsystem GmbH hereby declares that this product is in compliance with the essential requirements and other relevant provisions of Directive 2014/53/EU, 2011/65/EU and all other applicable EU directive requirements.
	FCC NOTICE TO USERS This device complies with FCC and Industry Canada RF radiation exposure limits set forth for general population. It must not be co-located or be operating in conjunction with any other antenna or transmitter.
In the United States:	
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, this is no guarantee that interference does not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be	


determined by turning the equipment off and on, you are encouraged to try to correct the interference by one or more of the following measures:	
<ul style="list-style-type: none"> • Reorient or relocate the receiving antenna. 	
<ul style="list-style-type: none"> • Increase the separation between the equipment and receiver. 	
<ul style="list-style-type: none"> • Connect the Headset Charger to an outlet on a different circuit than the one to which the receiver is connected. 	
<ul style="list-style-type: none"> • Consult the dealer or an experienced radio/TV technician for help. 	
<ul style="list-style-type: none"> • Changes or modifications not expressly approved by topsystem GmbH could void the user's authority to operate this equipment. 	
In USA and Canada:	
<p>This device complies with part 15 of the FCC rules and Industry Canada license-exempt RSS standard(s). Operation is subject to the following two conditions:</p> <ol style="list-style-type: none"> 1. This device may not cause harmful interference. 2. This device must accept any interference received, including interference that may cause undesired operation. 	
<p>Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:</p> <ol style="list-style-type: none"> 1. l'appareil ne doit pas produire de brouillage, et 2. l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement. 	
This class B digital apparatus complies with CAN ICES-3 (B) / NMB-3 (B).	
	<p>Waste Electrical and Electronic Equipment</p> <p>This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal helps to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city/town office or the distributor where you purchased your equipment.</p>

Table 7.1: Safety and Regulatory Information

Operating Specifications

The LYDIA™ Wireless Headset HS01BT operates in the Bluetooth Band of 2,402~2.480 GHz with an RF Output Power of <10dBm.

Index

Symbols

(Multi-Function button
MFB, 8

M

MFB, 8
Multi-Function button, 8
Mute OFF, 11
Mute ON, 11

S

Scan-to-Pair, 9
Standard Bluetooth pairing, 9

T

Touch-to-Pair, 9

U

Unmute, 11

FCC regulatory conformance:

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a **Class B** digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

The SAR limit of USA (FCC) is 1.6 W/kg for head averaged over one gram of tissue. Device types MC1BTMO-W (FCC ID: 2AEABMC1V3) has also been tested with 0mm against this SAR limit.

IC regulatory conformance

This device complies with CAN ICES-003 (B)/NMB-003(B).

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions:

- (1) this device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Cet appareil est conforme à la norme CAN ICES-003 (B)/NMB-003 (B).

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes :

- (1) l'appareil ne doit pas produire de brouillage, et
- (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

The SAR limit of Canada (ICES) is 1.6 W/kg for head averaged over one gram of tissue. Device types MC1BTMO-W (IC: 12773A-MC1V3) has also been tested with 0mm against this SAR limit.

EU regulatory conformance: :

RF exposure information: The EIRP power of the device at maximal case is below the exempt condition, 20mW specified in EN62479: 2010. RF exposure assessment has been performed to prove that this unit will not generate the harmful EM emission above the reference level as specified in EC Council Recommendation(1999/519/EC).

To prevent possible hearing damage, do not listen at high volume levels for long periods.



CE DOC

Hereby, topsystem GmbH declares that the radio equipment type HS01-BT is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: <http://www.lydia-voice.com/>

Manufacturer information:

Company name: topsystem GmbH

Address: Krefelder Strasse 201, Aachen, Germany 52070

Operation temperature: -20-60°C

Operation frequency(Max power)

Bluetooth: 2402-2480 (9.8dBm)