MB 110 WN

(SCBT8)

WHITE NOISE Secure Headset



Instruction manual



Contents

Important safety information	2
The MB 110 WN Bluetooth headset	4
Package contents	5
System requirements	5
Product overview	6
MB 110 WN headset	6
Charging accessories	6
Overview of pictograms	7
Overview of the LED indications	8
Overview of buttons	9
Putting the headset into operation 1	10
Charging the headset battery	10
Pairing the headset with Bluetooth devices	11
Using the headset 1	13
Individually adjusting the headset and wearing it	13
Switching the headset on and connecting it	15
Switching the headset off	16
Verifying remaining battery life	
Changing the volume 1	
Making calls using the headset 1	18
Cleaning and maintaining the headset 2 Updating the software of the product	
If a problem occurs 2 If you are out of the Bluetooth transmission range	
Specifications	23



Important safety information

- Read this instruction manual carefully and completely before using the product.
- Always include this instruction manual when passing the product on to third parties.
- Do not use an obviously defective product.

Preventing damage to health and accidents

- Do not listen at high volume levels for long periods of time to prevent hearing damage.
- Always maintain a distance of at least 3.94" (10 cm) between the ear cups and the cardiac pacemaker or implanted defibrillator since the product generates permanent magnetic fields.
- Keep the product, accessories and packaging parts out of reach of children and pets to prevent accidents and choking hazards.
- Do not use the product in an environment that requires your special attention (e.g. in traffic).
- Do not wear the headset during charging since the rechargeable battery can get warm.

Preventing damage to the product and malfunctions

- Always keep the product dry and do not expose it to extreme temperatures (hairdryer, heater, extended exposure to sunlight, etc.) to avoid corrosion or deformation.
- Only use attachments/accessories supplied or recommended by Sennheiser.
- Only clean the product with a soft, dry cloth.
- Only use the product in environments where wireless Bluetooth® transmission is permitted.

Safety instructions for rechargeable batteries

In extreme cases, abuse or misuse of rechargeable batteries can lead to:



WARNING

- · explosion,
- fire development,
- heat generation or
- smoke or gas development.



Dispose of products with built-in rechargeable batteries at special collection points or return them to your specialist dealer.



Switch rechargeable battery-powered products off after use.



Only charge rechargeable batteries at ambient temperatures between 10°C/50°F and 40°C/104°F.



When not using rechargeable batteries for extended periods of time, charge them regularly (about every 3 months).



Do not heat above 70 °C/ 158 °F, e.g. do not expose to sunlight or throw into a fire.



This headset is an accessory for mobile phones and is intended for wireless communication via Bluetooth connection. On the connected mobile phone the WHITE NOISE application needs to be installed and either the Apple "iPod Accessory Protocol" (iAP2) or the Android "Serial Port Profile" (SPP) must be supported.

It is considered improper use when this product is used for any application not named in this instruction manual.

Sennheiser does not accept liability for damage arising from abuse or misuse of this product and its attachments/accessories.

Sennheiser is not liable for damages to USB devices that are not consistent with the USB specifications.

Sennheiser is not liable for damages resulting from the loss of connection due to flat or overaged rechargeable batteries or exceeding the **Bluetooth** transmission range.

The MB 110 WN Bluetooth headset

The MB 110 WN Bluetooth headset is the wireless solution for highly secure communication. It only works together with the WHITE NOISE mobile application and features a hardware based encryption technology. The solution can support the highest security levels while allowing business users to continue using the mobile devices they already own.

Bluetooth



The headset complies with the **Bluetooth** 5.0 standard and is compatible with all **Bluetooth** 1.1, 1.2, 2.0, 2.1, 3.0, 4.0 and 5.0 devices with the Apple "iPod Accessory Protocol" (iAP2) or the Android "Serial Port Profile" (SPP). The headset provides wireless freedom to give hands-free convenience with your mobile phone.

Additional features of the Bluetooth headset

- Secure communication robust hardware encryption technology integrated directly in the headset
- WindSafe technology intelligent wind noise reduction using three digital microphones working in synergy and filtering away unwanted wind noise
- SpeakFocus technology adaptive noise reduction system with 3 digital microphones which is optimized for noisy environments e. g. in a car, outdoors or in the office
- Echo-free conversations digital echo cancellation eliminates all echoes while you are talking
- Easy to use due to power on/off slide and call control you can quickly take or end calls and adjust the volume to suit you best
- HD quality sound crystal-clear, detailed and transparent sound reproduction due to large wideband speaker and extended frequency response
- Lightweight comfort headset weighs only 13 grams
- Flexible wearing style wear left or right, use with or without ear hook
- Noise dependent volume control automatic, adaptive volume adjustment for optimized speech intelligibility and sound quality

Package contents



MB 110 WN mono **Bluetooth** headset with built-in rechargeable Lithium-Polymer battery



Adjustable ear hook



Ear adapters with loop (S, M, L)



Car charger (Sold Separately)



Charging cable



Quick Guide



Safety Guide



The WHITE NOISE application and its user guide will be delivered by the reseller.

System requirements

The MB 110 WN secure headset only works with the WHITE NOISE mobile application.



For further information: See WHITE NOISE Quick Guide and contact your IT administrator – if required.



Product overview

MB 110 WN headset



- 1 Volume + button*
- 2 Volume button*
- 3 Multi-function button
- **4** Microphones
- 5 On/Off power slide
- 6 Speaker
- 7 Ear hook
- **8** USB socket
- 9 LED

Charging accessories







(Sold Separately)

^{*} You can swap the +/- assignment of the Volume buttons (see page 17) If, for example, you want to wear the headset on the left ear instead of the right (see page 13).

Overview of pictograms

Meaning of the pictograms for pressing a button

Pictogram	Meaning	
	Briefly press this button.	
2x	Double-press this button.	
555	Keep this button pressed for 5 seconds.	

Meaning of the pictograms for the flashing of the LED

Pictogram	Meaning
*	This pictogram symbolizes a flashing.
1s	This pictogram symbolizes a time interval.

Examples of some of the pictograms that are used throughout this instruction manual:

Pictogram	Meaning	
* * * *	he LED flashes.	
3s	The LED flashes once every 3 seconds.	
1s j	The LED flashes 3 times per second.	

The pictogram "i"

Notes marked with the pictogram "i" provide important information on the use of the headset.

Overview of the LED indications

Meaning during operation

LED	Meaning	
* * *	Headset switches on	
* * *	Headset switches off	
* * * *	Headset is in pairing mode	
* * *	Pairing was successful	
* * *	Pairing has failed or has been cancelled	
2s 2s	Connectable state, not connected	

Once the headset is successfully connected, the LED goes off.

Meaning during calls

LED	Meaning
* * * *	Incoming call
* * * *	Incoming call + rechargeable battery is weak

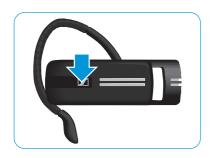
Meaning during charging

LED	corresponds to a battery life of
1x 💢	< 20%
1x 💥	> 20%
2x 💢	> 40%
3x 💢	> 60%
4x 💢	> 80%
*	100%; battery is fully charged

After 5 minutes of charging, the LED goes off. Press the multi-function button to check the battery charge level. When the battery is fully charged, the LED lights up blue for 5 minutes.

Overview of buttons

Multi-function button



Press the button	Function	Page	Beep(s)
	Accepts a call (incoming call)	18	-
	Ends a call (active call)	18	
	Retrieves information on the remaining battery life	16	
B	Rejects a call (incoming call)	18	-
15	During an active call: Mutes/unmutes the headset's microphone	18	
45	Changes to pairing mode (idle)	11	

Volume buttons



Button	Duration	Function	Page	Beep(s)
Press one of the volume buttons		During an active call: Increases/reduces the speaker volume In idle mode (no active call): Increases/reduces the volume for the ring tone, the beeps and the voice prompts	17	-



Button	Duration	Function	Page	Beep(s)
Press and hold both volume buttons	25	In idle mode (no active call): Reverses the function of the Volume +/- buttons	17	

Putting the headset into operation

Charging the headset battery



WARNING

Danger of injury!

Wearing the headset when charging can cause burns and injuries.

Do not wear the headset when charging.



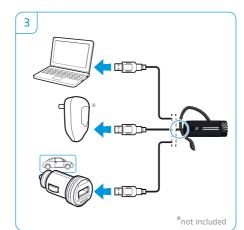
A complete charging cycle takes about 1 hour and 20 minutes. Before using the headset for the first time, charge the rechargeable battery for a complete charging cycle without interruption.

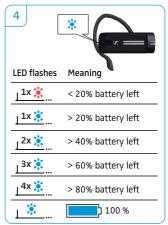
A charging time of	corresponds to a battery life of	LED flashes
approx. 10 min	< 20%	1x 💢
approx. 20 min	> 20%	1x 🔆
approx. 40 min	> 40%	2x 💢
approx. 60 min	> 60%	3x 💢

- 1 Take off the headset and switch it off (see page 16).
- 2 Connect the micro USB plug of the charging cable to the USB socket of the headset.
- 3 Connect the USB plug of the charging cable to the USB socket of your computer, the car charger or a power supply unit (not included).
- The battery is being charged. The LED flashes depending on the battery charge level. After 5 minutes, the LED goes off. Press the multi-function button to check the battery charge level. When the battery is fully charged, the LED lights up blue.









When the battery charge level drops below 10%, the LED flashes red and the voice prompt "recharge headset" is announced several times. When the battery is flat, the headset switches off automatically.

Pairing the headset with Bluetooth devices

CAUTION

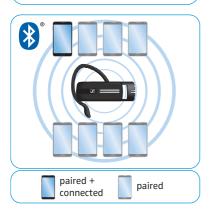
Danger of malfunction!

The transmitted radio waves of mobile phones can impair the operation of sensitive and unprotected devices.

▶ Only make calls with the headset in locations where wireless **Bluetooth** transmission is permitted.



The headset complies with the **Bluetooth** 5.0 standard. In order that data can be transmitted wirelessly using **Bluetooth** technology, you have to pair your headset with **Bluetooth** devices that support the Apple "iPod Accessory Protocol" (iAP2) or the Android "Serial Port Profile" (SPP) and has the WHITE NOISE application installed.



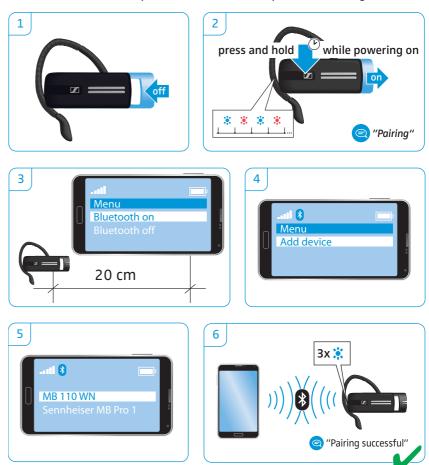
The headset can save the connection profiles of up to eight **Bluetooth** devices with which it has been paired. After switch-on, the headset automatically tries to connect to the last connected **Bluetooth** device. You can only connect a second **Bluetooth** device after having switched off the first **Bluetooth** device.

If you pair the headset with a ninth **Bluetooth** device, the saved connection profile of the least used **Bluetooth** device will be overwritten. If you want to re-establish a connection with this **Bluetooth** device, you have to pair the headset again.

Pairing the headset with a Bluetooth device

By way of example of a mobile phone, the following chapter describes how to pair the headset with a **Bluetooth** device. In case of deviation, proceed as described in the instruction manual of your mobile phone.

- 1 Switch the headset off (see page 16).
- 2 Keep the multi-function button pressed and gently pull the on/off power slide away from the headset. The LED alternately flashes blue and red. The headset is in pairing mode.
- 3 Enable the **Bluetooth** visibility on your mobile phone.
- 4 On the mobile phone, start a search for Bluetooth devices. All available devices in the proximity of the mobile phone are displayed.
- From the found Bluetooth devices, select "MB 110 WN" to establish a Bluetooth connection to the headset.
- 6 Once the headset is paired with the mobile phone, the LED goes off.

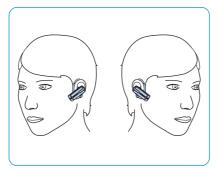


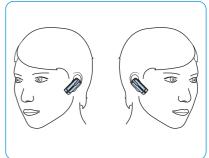
If pairing is not successful within 5 minutes, the headset automatically returns to connectable mode. Repeat the pairing procedure.

Using the headset

Individually adjusting the headset and wearing it

For an optimized and individual wearing comfort, the headset can be worn on your left or right ear in three different ways: with the ear hook or the ear adapter or a combination of both.

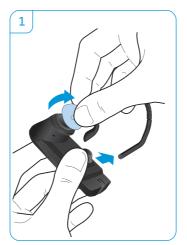


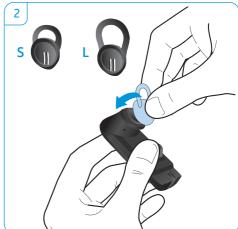


Wearing the headset with ear adapter

The ear adapter with loop is supplied in 3 different sizes: S, M, L. Select the size that fits your ear.

- 1 Remove the ear hook and the ear adapter without loop (premounted) or the ear adapter with loop from the headset.
- 2 Attach the selected ear adapter with loop to the headset.
- 3 Move the headset to your ear and insert the loop of the ear adapter.
- 4 Adjust the angle of the loop so that the headset fits comfortably and securely in your ear.





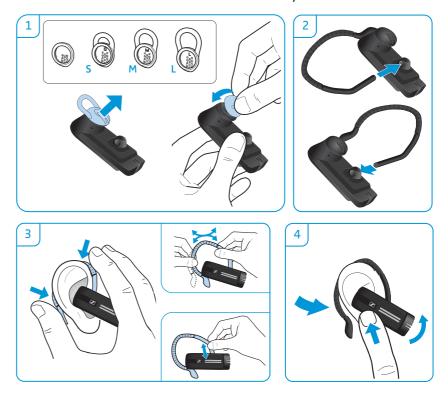




Wearing the headset using the ear hook

You can combine the ear hook with the ear adapter without loop. If then the headset does not fit properly, use one of the ear adapters with loop.

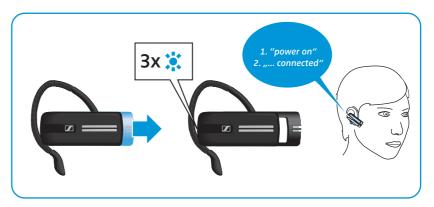
- 1 Remove the ear adapter with loop if necessary and attach the ear adapter without loop, whichever feels most comfortable.
- 2 Attach the ear hook to the headset. If you want to change the wearing ear of the headset, attach the ear hook the other way round.
- Move the headset to your ear and guide the ear hook behind your ear. If the headset does not fit optimally, slightly bend the ear hook a bit.
- 4 Position the headset so that it fits comfortably.

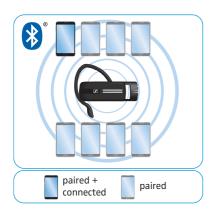


Switching the headset on and connecting it

▶ Gently pull the on/off power slide away from the headset. The LED flashes blue 3 times. The voice prompt "power on" is announced in the headset.

The LED flashes 3 times blue every 2 seconds until the headset finds a paired **Bluetooth** device to connect to. Once the connection is successfully established, the voice prompt "Phone one connected" is announced in the headset.





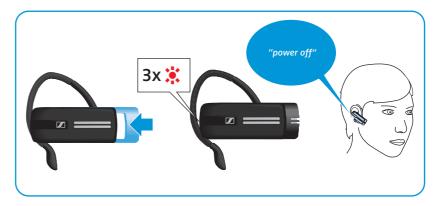
Only one out of the maximum eight paired Bluetooth devices can be connected to the headset ("paired + connected").

After switch-on, the headset automatically tries to connect to the last connected Bluetooth device.

Switching the headset off

► Gently push the on/off power slide towards the headset.

The voice prompt "power off" is announced in the headset and the LED flashes red 3 times. The headset ends the call and switches off.

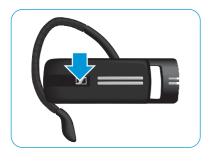


All volume settings are saved automatically when the headset is switched off.

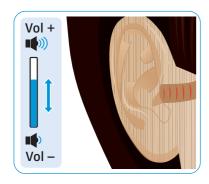
Verifying remaining battery life

You can retrieve information on the remaining battery life at any time except when you are on a call:

Press the multi-function button.



Information announced	LED flashes	Remaining battery life
"More than 80 percent battery left"	4x 🔆	> 80%
"More than 60 percent battery left"	3x 💥	> 60%
"More than 40 percent battery left"	2x 🔆	> 40%
"More than 20 percent battery left"	1x 🔆	> 20%
"Less than 20 percent battery left"	1x 🔆	< 20%
"Recharge headset"	1x 🔆	< 10%; automatic voice prompt



Changing the volume

\wedge

WARNING

Hearing damage due to high volumes!

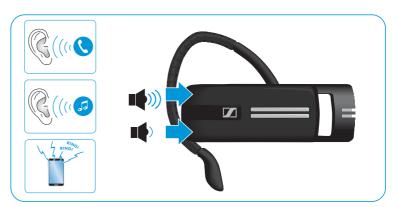
Listening at high volume levels for long periods can lead to permanent hearing defects.

- > Set the volume to a low level before putting on the headset.
- ▶ Do not continuously expose yourself to high volumes.

You can adjust three independent volume settings for the headset:

- speaker volume: can be adjusted during an active call,
- volume for the ring tone, the beeps and the voice prompts: can be adjusted in idle mode (no active call)
- Press the
 - Volume + button to increase the volume.
 - Volume button to reduce the volume.

When the minimum or maximum volume is reached, the voice prompt "Volume min" or "Volume max" is announced in the headset.



Swapping the +/- assignment of the Volume buttons

You can swap the +/- assignment of the Volume buttons If, for example, you want to wear the headset on the other ear (see page 13).

▶ Keep both Volume buttons pressed for 2 seconds to swap the +/— assignment of the buttons. The voice prompt "swap volume keys" is announced in the headset.



Making calls using the headset



Application

Making a call

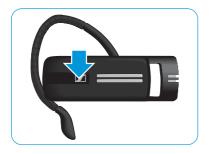
Dial the desired number on your mobile phone using the WHITE NOISE application.





You hear a ring tone in the headset and the LED flashes blue. If the headset battery is low, the LED flashes red instead of blue.

Press the multi-function button:



Duration	Function		Voice prompt/beeps
	0	Accepts a call	5.
15	X	Rejects a call	"Call rejected"
2x		Puts an active call on hold (pause)	-
		Ends a call	"Call ended"

Muting the headset's microphone

Press the multi-function button:



Duration	Function		Voice prompt
15	X	Mutes the headset's microphone	"Mute on"
15	Q	Unmutes the headset's microphone	"Mute off"

Cleaning and maintaining the headset

Cleaning the headset

Only use a dry cloth to clean the product.

Storing the headset

If you do not use the headset for extended periods of time:

- ► Charge the built-in rechargeable battery every 3 months for about 1 hour.
- > Store the headset in a clean and dry environment.

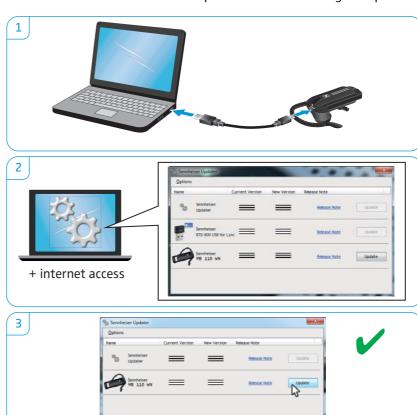
Updating the software of the product

You can update the software of your headset by using the free "Sennheiser Updater" PC software.

- Download the "Sennheiser Updater" from www.sennheiser.com/cco/software.
- Install the PC software. To install the software, you need administrator rights on your computer. If necessary, contact your IT department.

Updating the software of the headset

- 1 Use a USB cable with mini USB plug to connect the headset to your computer.
- 2 Start the "Sennheiser Updater". The "Sennheiser Updater" compares the installed firmware version of the headset to the latest firmware version available for download. If your firmware needs to be updated, upgrade to the latest version according to the instructions of the "Sennheiser Updater".
- 3 To update the software, only one product may be connected at a time. Disconnect all other Sennheiser products before starting the update.



If a problem occurs ...

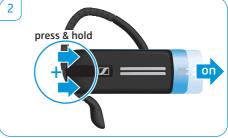
Problem	Possible cause	Possible solution	Page
Headset cannot be switched on	The rechargeable battery is flat.	Recharge the rechargeable battery.	10
No audio signal	The headset is not paired with the mobile phone.	Check if the headset is paired. If necessary, pair the headset again.	12
	The volume is adjusted too low.	Increase the volume.	17
	The headset is switched off.	Switch the headset on.	15
Headset cannot be paired	The pairing does not work.	Check if your Bluetooth device supports Apple iAP2 or Android SPP	-
	The mobile phone is switched off.	Switch the mobile phone on.	-
Headset does not react to any button press	The operation of the headset is faulty.	Reset the headset to the factory default settings.	21

If a problem occurs that is not listed in the above table or if the problem cannot be solved with the proposed solutions, please contact your local Sennheiser partner for assistance. To find a Sennheiser partner in your country, search at www.sennheiser.com.

Restoring factory default settings (Reset)

- 1 Switch the headset off (see page 16).
- Keeping both Volume buttons pressed, gently pull the on/off power slide away from the headset. The LED flashes 3 times purple and then alternately blue and red. The headset tries to pair with the Bluetooth devices (see page 11).





If you are out of the Bluetooth transmission range

Calling is only possible in the **Bluetooth** transmission range of the mobile phone. The transmission range largely depends on environmental conditions such as wall thickness, wall composition etc. With a free line of sight, the transmission range of most mobile phones is up to 30 meters.

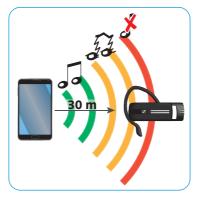
If the headset leaves the transmission range of the connected mobile phone during a call, the voice prompt "Phone one disconnected" is announced in the headset.

If you re-enter the Bluetooth transmission range within 5 minutes, the connection is re-established and the voice prompt "Phone one connected" or "Phone two connected" is announced in the headset.

If you spend more than 5 minutes outside the Bluetooth transmission range, the connection breaks down completely and you have to manually re-establish the connection.

To re-establish a connection to the mobile phone:

- Briefly press the multi-function button.
 Once the connection is successfully re-established, one of the following voice prompts is announced in the headset:
 - "Phone one connected" for the first mobile phone
 - "Phone two connected" for the second mobile phone





Specifications

MB 110 WN headset

Dimensions (W x H x D) approx. 51 x 19 x 23 mm Weight without ear hook approx. 13 g Standby time up to 10 days Talk time up to 7 hours Charging time 1 h 20 min Rechargeable battery (built-in) Lithium Polymer; 3.7 V, 120 mAh dynamic, neodymium magnet Speaker type 300 - 3,400 Hz (narrowband) Speaker frequency response Sound pressure max. 118 dB SPL (ERP) 3 digital MEMS microphones Microphone type 300 - 3,400 Hz (narrowband) Microphone frequency response +10°C (+50°F) to Operating temperature range +40°C (+104°F) Operating relative humidity 20 to 85%, non-condensing -20°C (-4°F) to +60°C (140°F) Storage temperature range Storage relative humidity 10 to 95%, non-condensing

Car charger

 model number
 504570

 Input
 12-24 V DC/0.5 A

 Output
 5 V DC/500 mA



Bluetooth

Bluetoothversion 5.0/class 1Rangeup to 30 m (device dependent)

Transmission frequency 2402 MHz to 2480 MHz

Profiles Apple "iPod Accessory Protocol"

Android "Serial Port Profile" (SPP)

Output power 6.5 dBm/4.47 mW

T ! |

Typical sensitivity -89 dBm

Trademarks

The **Bluetooth**[®] word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Sennheiser Communications A/S is under license.

French Canadian Compliance Statements

"Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device."

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 nedoit 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 Canadian ICES-003."

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

"This device and its antenna(s) must not be co-located or operating in conjunction with any other antenna or transmitter."

Cet appareil et son antenne (s) ne doit pas être co-localisés ou fonctionnant en conjonction avec une autre antenne ou transmetteur.

FCC Information to User

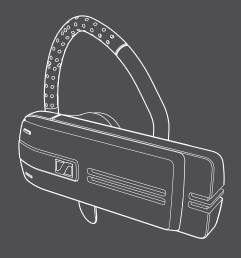
This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate 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 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 con-nected.
- Consult the dealer or an experienced radio/TV technician for help.

Caution

Modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

FCC Compliance Information : 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, and (2) this device must accept any interference received, including interference that may cause undesired operation.



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