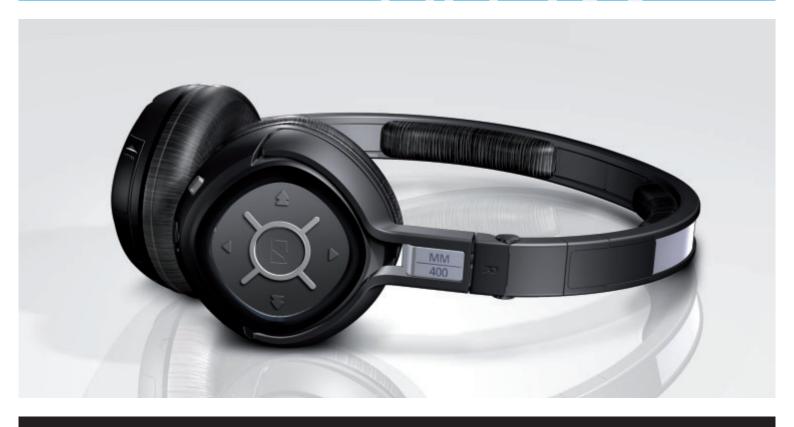


Give Your Phone the Sound it Deserves MM 400



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Important safety instructions

- Please read these instructions carefully and completely before using the headset.
- Make these instructions easily accessible to all users at all times.
 Always include these instructions when passing the headset on to third parties.
- Only use the headset in aircraft where wireless Bluetooth® transmission is permitted.
- Do not use the headset in situations which require special attention (e.g. in traffic or when performing skilled jobs).
- Always keep the headset dry and do not expose it to extreme temperatures (normal operating temperatures: 10°C/50°F to 35°C/95°F).
 - Use the headset with care and store it in a clean, dust-free environment
 - Switch off the headset after use to conserve battery power. Remove the batteries if the headset will not be used for extended periods of time
- The headset contains magnets that generate a magnetic field which could cause dangerous interference with cardiac pacemakers and implanted defibrillators. Keep the headset at least 1.2" (3 cm) from cardiac pacemakers or implanted defibrillators.
- Please protect your hearing from high volume levels. Sennheiser headsets also sound exceptionally good at low volumes.
- Only use the supplied mains unit and charging cable.
- To reduce the risk of fire or electric shock, do not use the device and the mains unit near water and do not expose them to rain or moisture.
- Unplug the mains unit from the wall socket
 - to completely disconnect the device from the mains
 - during lightning storms or
 - when unused for long periods of time.
- Only operate the mains unit from the type of power source specified in the chapter "Specifications" (see page 24).
- · Ensure that the mains unit is
 - in a safe operating condition and easily accessible,
 - properly plugged into the wall socket,
 - only operated within the permissible temperature range,
 - not covered or exposed to direct sunlight for longer periods of time in order to prevent heat accumulation (see "Specifications" on page 24).
- Do not operate the device and the mains unit near any heat sources.
- Only use attachments/accessories specified by Sennheiser.

Intended use

Intended use of the headset includes

- having read this instruction manual, especially the chapter "Important safety instructions" on page 2,
- using the headset within the operating conditions and limitations described in this instruction manual.

"Improper use" means using the headset other than as described in this instruction manual, or under operating conditions which differ from those described herein.

Safety instructions for the Lithium-Polymer battery pack

If abused or misused, the battery pack may leak. In extreme cases, it may even present



- a heat hazard,
- a fire hazard,
- · an explosion hazard,
- a smoke or gas hazard.

Please understand that Sennheiser does not accept liability for damage arising from abuse or misuse.



MM 400

The MM 400 is an accessory which allows for wireless music enjoyment when used with mobile phones or other **Bluetooth** devices/**Bluetooth** compliant devices. Its supra-aural, closed design makes the MM 400 especially suitable for use with in-flight entertainment systems.

Bluetooth



The MM 400 complies with the new **Bluetooth** 2.1 standard. Via its **Bluetooth** interface, it can be connected to a wide variety of **Bluetooth** enabled devices. Bluetooth wireless technology allows the MM 400 to communicate with your **Bluetooth** enabled device (e.g. mobile phone, MP3 player, PC or PDA) within a range of up to 10 meters.

Additional features

- Great for travel: comfortable, rugged and foldable headset construction
- Optional connection via audio cable for music enjoyment without Bluetooth technology
- Outstanding sound quality due to patented adaptive baffle damping and Duofol diaphragms

Delivery includes

- 1 MM 400 headset
- 1 BA 370 PX battery pack
- 1 USB charging cable
- 1 PSC 03R-050 mains unit with country adapters
- 1 audio cable (2.5 mm to 3.5 mm jack plug)
- 1 inflight adapter(3.5 mm double mono jack plug)
- 1 transport case
- 1 quick start guide
- 1 CD ROM with
 - detailed instruction manual (PDF file)
 - interactive instruction manual

Overview of the pictograms

Meaning of the pictograms for pressing a button

Pictogram	Meaning
	Briefly press this button.
45	Keep this button pressed for 4 seconds.
C	Keep this button pressed until the desired setting is made or the desired action is completed.

Meaning of the pictograms for the flashing of the LED

Pictogram	Meaning
¤	This pictogram symbolizes a flashing.
-	This pictogram symbolizes an interruption.
1s	This pictogram symbolizes an interval.
	This pictogram symbolizes a continuous flashing.

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

Pictogram	Meaning
- ¤ -	The LED flashes once every 3 seconds.
	The LED flashes 3 times per second.
- ¤¤ -	The LED flashes in a rhythmic sequence.
m-m-m	The LED flashes blue 3 times and then goes off.

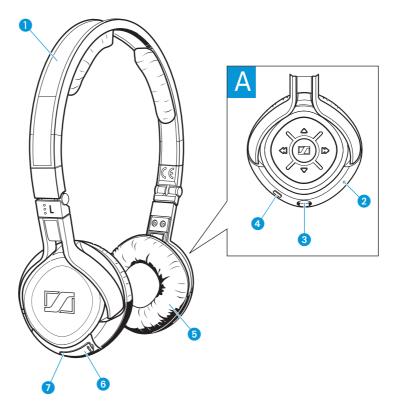
The pictogram "i"



This note provides important information!

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

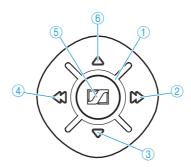
Product overview



- Headband
- 2 Microphone
- 3 Socket for audio cable
- 4 Bluetooth button
- 6 Ear pad
- **6** Socket for charging cable
- Battery pack compartment



Operating panel

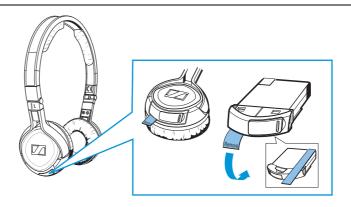


- 1 X LED
- ② Fast-forward ➤ button
- ③ Volume ▼ button
- 4 Rewind ← button
- Master button
- 6 Volume ▲ button

Putting the MM 400 into operation

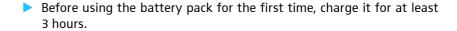


Before using the MM 400 for the first time, remove the protection strip from the battery pack.



Charging the battery pack







When charging the battery pack, the LED 9 on the battery pack lights up red. When the battery pack is fully charged, the LED 9 on the battery pack lights up green.



When the battery pack is almost flat, the \(\overline{\cute{LED}}\) on the headset flashes red. You hear a short, negative acknowledgement tone.

The operating time of the battery pack depends on the device settings, the listening situation and the audio sources used.

Type of use	Operating time
Bluetooth technology	10 hours

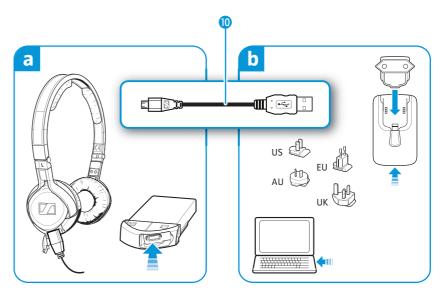


Remove the battery pack if the headset will not be used for extended periods of time.

You can also charge the battery pack while using the headset.

Possibilities of charging the battery pack

First, connect the charging cable (1) to the battery pack as described in section a and then connect the charging cable (1) to a power source as described in section b.



Connecting the charging cable to the battery pack

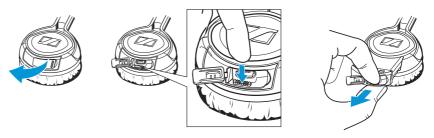
You can charge the battery pack either inside or outside the headset. This is helpful if you are using a spare battery pack (to be ordered separately).

To charge the battery pack inside the headset:

- Open the battery pack compartment cover 7 on the left ear cup.
- Connect the charging cable 10 to the socket for charging cable 6 on the headset.

To charge the battery pack outside the headset:

- Open the battery pack compartment cover 7 on the left ear cup.
- Press the button next to the battery pack compartment and remove the battery pack.



Connect the charging cable 10 to the socket for charging cable 6 on the battery pack.







Connecting the charging cable to the mains unit, to a PC or to other USB devices

In order to charge the battery pack, you can connect the charging cable to either the USB socket of your PC or the supplied mains unit or to other USB devices.

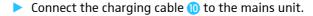
To connect the charging cable to a PC:

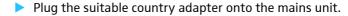


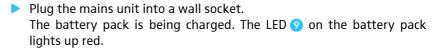
Connect the USB plug of the charging cable 10 to the USB socket of your PC.

The battery pack is being charged. The LED 9 on the battery pack lights up red.

To connect the charging cable to the mains unit:



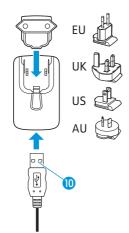




After charging, unplug the mains unit from the wall socket.

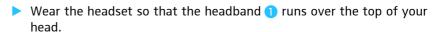
If you have charged the battery pack outside the headset:

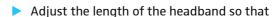
- Insert the charged battery pack into the headset's battery pack compartment until it locks into place.
- Close the battery pack compartment cover 7.



Adjusting the headband

For optimum transmission quality, good noise attenuation and best possible comfort, the headband has to be adjusted to properly fit your head:





- the ear pads 5 rest comfortably against the ears,
- you feel even, gentle pressure around your ears,
- a snug fit of the headband 1 on the head is ensured.
- ➤ To ensure maximum noise attenuation, final adjustment is best made in a noisy environment.



Switching the MM 400 on/off

CAUTION! Hearing damage due to high volumes!

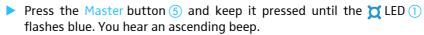


Listening at high volume levels for long periods can lead to permanent hearing defects. Please protect your hearing. Sennheiser headsets also sound exceptionally good at low volumes

> Set the volume to a comfortable level.

Switching the MM 400 on





- When switching the headset on for the first time, it will automatically go into pairing mode. The headset is waiting to be paired with a Bluetooth enabled device (see page 12).
- When the headset is already paired with an audio source, the Bluetooth connection is automatically established. You hear an ascending beep and then your audio source.
- When the headset is already paired with an audio source but the audio source is switched off or out of range, the

 ∠ LED

 flashes blue. The headset will try for 3 minutes to connect to one of the up to 8 previously paired audio sources. If this fails, the headset automatically switches off after 60 minutes.

Switching the MM 400 off



a-a-a

Press the Master button (5) and keep it pressed until the X LED (1) flashes 3 times red.

You hear a descending beep. The **Bluetooth** connection is automatically deactivated. The headset switches off.

Connecting the MM 400 to the audio source

CAUTION! Danger of malfunction!



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

Only use the headset in aircraft where wireless **Bluetooth** transmission is permitted or use the audio cable instead (see "Connecting the MM 400 using the audio cable" on page 15).

The headset complies with the **Bluetooth** 2.1 standard. In order that data can be transmitted wirelessly using Bluetooth technology, you have to register your headset with your audio source (pairing).

The headset can save the connection profiles of up to 8 **Bluetooth** devices with which it has been paired. After switch-on, the headset automatically connects to one of these devices.

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

If your audio source does not have a Bluetooth interface, use an optional dongle (see "Accessories and spare parts" on page 23).



For an optimum listening experience, your audio source has to support the A2DP profile.

Pairing the MM 400 with an audio source



► Make sure that your headset is switched off (see "Switching the MM 400 off" on page 11).

When switching the headset on for the first time, it will automatically go into pairing mode. The headset is waiting to be paired with a **Bluetooth** enabled device (see page 12).



- On your audio source, activate the Bluetooth function "Add a new device".
- Proceed as described in the instruction manual of the audio source.



If a suitable audio source is found, the devices will exchange device identification information. The <code>XLED</code> ① flashes 3 times blue and you hear an ascending beep. The devices have identified each other and the headset is paired with the audio source.



PIN code

When the audio source prompts for a password or PIN code, enter the default PIN code "0000".



If no device is found within approx. 5 minutes, the LED 1 flashes 3 times red and you hear a descending beep. The headset will then try for 3 minutes to connect to one of the up to 8 previously paired audio sources. If this fails, the headset automatically switches off after 60 minutes.

In this case, repeat the necessary steps to pair the headset with the audio source again.

Switching the "Bluetooth connection" flashing on/off

Switch the headset off (see "Switching the MM 400 off" on page 11).



To switch the flashing on during a **Bluetooth** connection:

- ▶ Press the Master button ⑤ and keep it pressed until the X LED ① alternately flashes blue and red.
- ▶ Briefly press the Volume ▲ button (6).



To switch the flashing off during a **Bluetooth** connection:

▶ Briefly press the Volume ▼ button ③.

Disconnecting the Bluetooth connection



The Bluetooth button 4 is backlit, indicating the current setting. The backlighting goes off after a short time to conserve energy.

Press any button on the headset to display the current setting of the Bluetooth function.

To disconnect the **Bluetooth** connection to the audio source, you can switch off the headset or the **Bluetooth** function. This setting is retained until the **Bluetooth** function is switched on again, even when you switch the headset off in the meantime.

To switch the headset off:



¤-¤-¤

▶ Press the Master button ⑤ and keep it pressed until the 其LED ① flashes 3 times red.

You hear a descending beep. The **Bluetooth** connection is automatically deactivated. The headset switches off.







▶ Press the Bluetooth button 4 and keep it pressed until the ☐ LED 1 flashes 3 times red. You hear a descending beep.
The Bluetooth button 4 goes off. The Bluetooth function is switched off.

Connecting the MM 400 using the audio cable

Connecting the audio cable

You can connect the headset to the audio source using the audio cable if

- · you do not want to use the Bluetooth function,
- you are not allowed to use the Bluetooth function (some airlines do not allow Bluetooth transmission)
- the battery pack is flat.

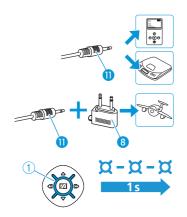


When the audio cable is connected to the headset, the **Bluetooth** function cannot be switched on.



If the headset is already connected to the audio source via the **Bluetooth** interface, the **Bluetooth** connection is automatically disconnected when you connect the audio cable. The \scite{N} LED \scite{N} flashes 3 times red and you hear a descending beep.

- Connect the 2.5 mm jack plug of the audio cable to the socket 3 of the headset.
- Connect the 3.5 mm jack plug of the audio cable (1) to the headphone socket of your audio source.
- Slip on the in-flight adapter (3) if you wish to use the headphones with the in-flight entertainment system of the aircraft.



When the audio cable is connected to your audio source, you hear the sound from your audio source and the tell (1) flashes blue.

Detaching the audio cable

If you want to use the MM 400 as a **Bluetooth** headset, you can detach the audio cable 11.

▶ Pull the 2.5 mm jack plug of the audio cable 11 from the socket 3 of the headset.



When detaching the audio cable, the **Bluetooth** function is not automatically switched on.

Switch the **Bluetooth** function on again (see "Switching the **Bluetooth** function on/off" on page 16).

Using the MM 400

Adjusting the MM 400 to the listening situation

The headset has a **Bluetooth** function for wireless connectivity. Depending on the listening situation, you can switch this function on or off.

Switching the Bluetooth function on/off

Via the **Bluetooth** interface, the headset can be connected to a wide variety of **Bluetooth** enabled devices.

To switch the **Bluetooth** function on:





▶ Press the Bluetooth button 4 and keep it pressed until the

LED 1

flashes 3 times blue. The Bluetooth function is switched on.

To switch the Bluetooth function off:

Press the Bluetooth button 4 and keep it pressed until the

☐ LED 1

flashes 3 times red. You hear a descending beep.

The Bluetooth button 4 goes off. The ☐ LED 1 flashes blue and the Bluetooth function is switched off.

Changing the volume

The MM 400 allows you to change the volume of the audio signal:

Button	Duration	Function	Button	Duration	Function
A D D		Incrementally increases the volume		A	Incrementally reduces the volume
		Continuously increases the volume			Continuously reduces the volume

If you press the respective button briefly, the volume is changed incrementally; if you hold down the button, the volume is changed continuously.

When the minimum or maximum volume is reached, you hear an acknowledgement tone.

Remote-controlling connected devices from the MM 400

You can directly remote-control any device supporting the AVRCP profile and connected to the MM 400 by using the buttons on the headset. Please refer to the instruction manual of your audio source for information on whether your device supports the AVRCP profile.

If your device does not support the AVRCP profile, you can use an optional dongle. Using the iPod dongle or the USB dongle, you can remote-control the connected devices from the headset.

Remote-controlling the audio source from the MM 400

If your headset has a **Bluetooth** connection to an audio source (e.g. iPod, MP3 or CD player), you can use the MM 400 to remote-control the audio source as follows:

Button	Duration	Function	Button	Duration	Function
4 7 P		Incrementally increases the volume			Incrementally reduces the volume
4 2 3	1sl	Continuously increases the volume		1s	Continuously reduces the volume
The state of the s		Skips to the next track			Skips to the previous track
4	1sl	Fast-forwards the track *			Rewinds the track *
Q Z D		Plays and repeats the track		1s	Stops the track (acknowledge- ment tone)

^{*} These functions are not supported by all connected **Bluetooth** devices.

Remote-controlling a mobile phone from the MM 400



If your headset has a **Bluetooth** connection to your mobile phone, the **CLED** on the headset flashes to indicate that the mobile phone is ringing. The LED flashes 3 times blue. After a pause, the flashing is repeated. You can also hear the ring tone of your mobile phone if your mobile phone supports this function.

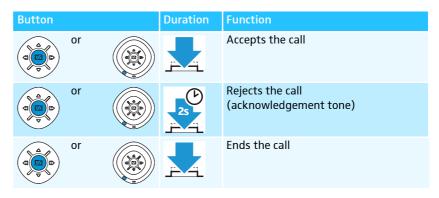


Switching the Bluetooth function off

If you press the Bluetooth button 4 too long, the Bluetooth function switches off!

You can use the MM 400 to remote-control different functions of your mobile phone.

If the mobile phones rings:



If the mobile phone is switched on, does not ring and you do not make a phone call:

Button	Duration	Function
	1s	Redials the last number (acknowledgement tone)
	A	Activates voice dial

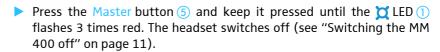
During a call:

Button	Duration	Function
	5 s	Transfers the ongoing call back to the mobile phone
	2s	Activates the muting function (acknowledgement tone)
Any button		Deactivates the muting function

Resetting the settings of the MM 400

You can reset all settings of your headset to the factory default settings. This allows you to prevent that other users of the headset can access your **Bluetooth** enabled devices. You can then pair five new devices with the headset.







▶ Press the Master button ⑤ and keep it pressed until the X LED ① alternately flashes blue and red.



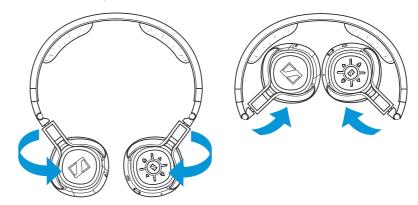


Press the Bluetooth button 4 and keep it pressed until the settings of the headset are reset.

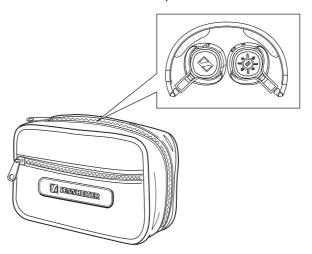
Transporting the MM 400

For space-saving transportation, the headset can be folded up flatly and compactly.

- Rotate the ear cups by 90°.
- Tuck the ear cups between the headband.



▶ Place the headset flat into the transport case.



Cleaning and maintaining the MM 400

Cleaning the MM 400

CAUTION! Liquids can damage the electronics of the device!



Liquids entering the housing of the device can cause a short-circuit and damage the electronics.

- ► Keep all liquids far away from the device.
- Do not use any cleansing agents or solvents.

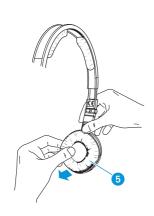
For reasons of hygiene, you should clean the headset regularly:

- Before cleaning, make sure that the headset is not recharged via the mains.
- ▶ Only use a soft, slightly damp cloth to clean the headset.

Replacing the ear pads

You can replace the ear pads. Spare ear pads are available as accessories (see "Accessories and spare parts" on page 23).

- ► Grasp the edge of the ear pad 5 behind the ear cup and peel it up and away from the ear cup.
- ▶ Slide the new ear pad **5** onto the ear cup.



If a problem occurs ...

Problem	Possible cause	Solution
No operation indicator – headset cannot be switched on	The battery pack is flat.	Recharge the battery pack (see page 8).
No audio signal when the audio cable is connected	The jack plug of the audio cable is not properly connected.	Check the connection to your audio source (see page 15).
No audio signal during Bluetooth	The headset is switched off.	Switch the headset on (see page 11).
connection	The headset is not paired with an audio source.	Check if the headset is paired. If necessary, pair the headset with the audio source again (see page 13).
	The Bluetooth function on the headset is switched off.	Switch the Bluetooth function on the headset on (see page 16).
	The audio cable is connected to the headset.	The connection of the audio cable automatically switches off the Bluetooth connection. Remove the audio cable and then switch the Bluetooth function on again (see page 16).
	The volume is adjusted too low.	Increase the volume (see page 16).
Headset cannot be paired	The pairing does not work.	Check if the audio source supports the A2DP profile. If not, use one of the optional dongles.
	The audio source is switched off.	Switch the audio source on (see page 12).
Headset does not react to any button press	The operation of the headset is faulty.	Remove the battery pack from the headset. Reinsert the battery pack into the headset. Switch the headset on again.
Bluetooth connection is suddenly interrupted	The Bluetooth button has been pressed too long.	Switch the Bluetooth function on (see page 16).

Accessories and spare parts

The following MM 400 accessories are available from your specialist dealer:

Cat. No.	Accessory/spare part
531404	Ear pads, 1 pair
531405	Headband padding, 1 pair
521829	PSC 03R-050 mains unit with 4 country adapters (EU/UK/US/AU)
531406	Audio cable (2.5 mm jack plug to 3.5 mm jack plug)
525731	In-flight adapter (3.5 mm double mono jack)
531407	USB cable (microUSB to USB)
530695	BA 370 PX battery pack
502388	BTD 300 Audio
502390	BTD 300 USB
502389	BTD 300i

Specifications

Transducer principle dynamic, closed Ear coupling supra-aural Frequency response 15-22,000 Hz Nominal impedance active/passive $590/100 \Omega$ Sound pressure level at 1 kHz and 1 Volt 107 dB SPL THD at 1 kHz < 0.1% 3.5 mm stereo jack socket Audio connection Cable length Audio cable 1.4 m Charging cable 0.8 m 105 g Weight BA 370 PX battery pack 3.7 V; 250 mAh Lithium-Polymer Charging time 3 hrs Operating time 10 hrs 0°C to +40°C Operating temperature range

PSC 03R-050 mains unit

Storage temperature range Passive noise attenuation

110-240 V~ Nominal input voltage Nominal input current max. 0.2 A 50-60 Hz Mains frequency 5 V === Nominal output voltage Nominal output current max. 0.5 A 0°C to +45°C Operating temperature range -40°C to +85°C Storage temperature range Relative humidity 20 to 90% Weight approx. 61 g

-10°C to +70°C

25 dB

Bluetooth



Bluetooth®
Range
Transmission frequency
Transmission power
Protocoles
Codec

version 2.1 + EDR
up to 10 m
2.4 GHz
8 dBm
HSP, HFP, A2DP, AVRCP
SBC

Manufacturer Declarations

Warranty

Sennheiser Communications A/S gives a warranty of 24 months on this product. For the current warranty conditions, please visit our website at www.sennheiser.com or contact your Sennheiser partner.

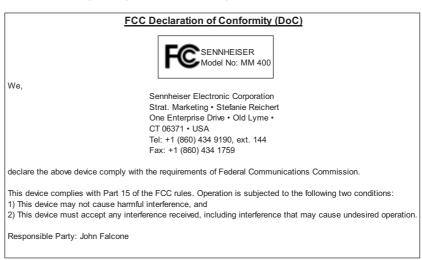
CE Declaration of Conformity

These devices comply with the basic requirements and other relevant provisions of the following directives:

- R&TTE Directive (1999/5/EC)
- EMC Directive (2004/108/EC)
- Low Voltage Directive (2006/95/EC)
- RoHS Directive (2002/95/EC)
- WEEE Directive (2002/96/EC)
- Battery Directive (2006/66/EC)

The declaration is available on the internet at www.sennheiser.com. Before putting the devices into operation, please observe the respective country-specific regulations!

Statements regarding FCC and Industry Canada



This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. 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.

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.

This class B digital apparatus complies with the Canadian ICES-003.

Changes or modifications made to this equipment not expressly approved by Sennheiser electronic Corp. may void the FCC authorization to operate this equipment.

In compliance with:

USA	FCC ID: DMOCBSSAB
	Since the radiated output power of this Class1 BT device is far below the FCC radio frequency exposure limits, it is not subjected to routine RF exposure evaluation as per Section 2.1093 of the FCC rules.
Canada	IC: 2009D – MMBTX
Europe	C€ 0889 🕱 🕱
Australia / New Zeeland	C N340
Singapore	Complies with IDA Standards DB100582
China	CMIIT ID: 2009DJ3545
Taiwan	((CCAB09LP4080T6
Japan	R 203WWJN000007
Russia	ME61
Korea	SC9 - MM400

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