

# BiCore B M

BiCore B M SDemo

30

20

10

DATA SHEET



Made for

iPhone | iPad | iPod

## Earhook

- 60 dB / 133 dB SPL (2 ccm coupler)
- 67 dB / 138 dB SPL (Ear simulator)

## ThinTube 3.0

- 61 dB / 125 dB SPL (2 ccm coupler)
- 65 dB / 129 dB SPL (Ear simulator)

## ThinTube 3.0 P

- 64 dB / 126 dB SPL (2 ccm coupler)
- 67 dB / 131 dB SPL (Ear simulator)

## BiCore B M · Technical Data

| Type  | Earhook                          |                 |
|---|----------------------------------|-----------------|
|   | 2 ccm coupler                    | Ear simulator   |
| <b>Output sound pressure level</b>                      |                                  |                 |
| OSPL 90 at 1.6 kHz                                      | –                                | 136 dB SPL      |
| OSPL 90 (peak)  | 133 dB SPL                       | 138 dB SPL      |
| HFA OSPL 90   | 124 dB SPL                       | –               |
| <b>Gain</b>   |                                  |                 |
| FOG at 1.6 kHz  | –                                | 63 dB           |
| FOG (peak)  | 60 dB                            | 67 dB           |
| HFA FOG   | 53 dB                            | –               |
| Reference test gain                                     | 47 dB                            | 56 dB           |
| <b>Frequency, noise and directivity</b>                 |                                  |                 |
| Frequency range   | 120 – 7700 Hz                    | 940 – 7700 Hz   |
| Equivalent input noise                                  | 16 dB SPL                        | 16 dB SPL       |
| Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz | 4 / 3 / 1 / 1 %                  | 4 / 3 / 1 / – % |
| Tinnitus Function broadband                             | 70 dB SPL                        | –               |
| AI-DI   | 4.0 dB                           |                 |
| <b>Inductive coil sensitivity</b>                       |                                  |                 |
| MASL (1 mA/m) at 1.6 kHz                                | –                                | 92 dB SPL       |
| HFA MASL (1 mA/m)                                       | 82 dB SPL                        | –               |
| HFA SPLITS (left/right)                                 | 107 / 107 dB SPL                 | –               |
| RSETS (left/right)                                      | 0 / 0 dB                         | –               |
| HFA SPLIV   | 108 dB                           | –               |
| <b>Battery</b>  |                                  |                 |
| Battery voltage   | 1.3 V                            |                 |
| Battery current drain                                   | 1.6 mA                           | 1.5 mA          |
| Battery runtime (without streaming)                     | up to 142 h                      |                 |
| Battery runtime (incl. 20 h streaming)                  | up to 129 h                      |                 |
| <b>Cellphone Compatibility</b>                          |                                  |                 |
| Microphone mode   | 0.65 – 0.96 GHz<br>1.4 – 2.7 GHz |                 |
| Telecoil mode   | 0.65 – 0.96 GHz<br>1.4 – 2.7 GHz |                 |

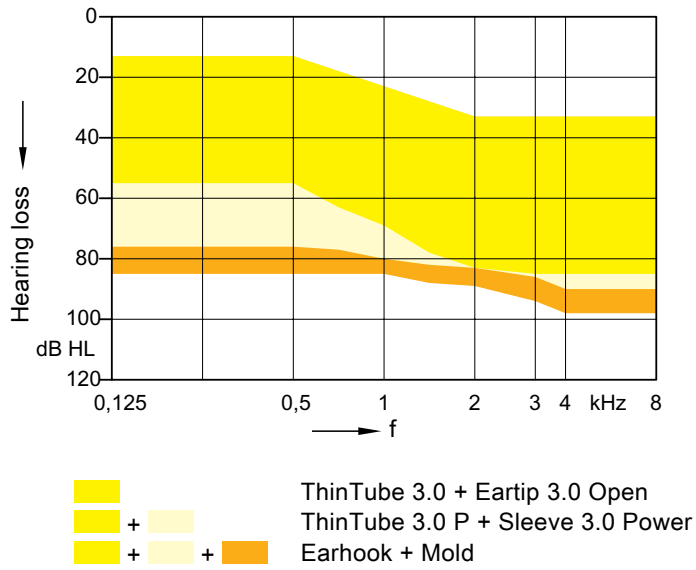
Please find additional information to the values on page “Further information”.

## BiCore B M · Technical Data

| Type  | ThinTube 3.0                     |                 | ThinTube 3.0 P                   |                 |
|---|----------------------------------|-----------------|----------------------------------|-----------------|
|   | 2 ccm coupler                    | Ear simulator   | 2 ccm coupler                    | Ear simulator   |
| <b>Output sound pressure level</b>                      |                                  |                 |                                  |                 |
| OSPL 90 at 1.6 kHz                                      | –                                | 121 dB SPL      | –                                | 125 dB SPL      |
| OSPL 90 (peak)  | 125 dB SPL                       | 129 dB SPL      | 126 dB SPL                       | 131 dB SPL      |
| HFA OSPL 90   | 116 dB SPL                       | –               | 120 dB SPL                       | –               |
| <b>Gain</b>   |                                  |                 |                                  |                 |
| FOG at 1.6 kHz  | –                                | 55 dB           | –                                | 59 dB           |
| FOG (peak)  | 61 dB                            | 65 dB           | 64 dB                            | 67 dB           |
| HFA FOG   | 51 dB                            | –               | 57 dB                            | –               |
| Reference test gain                                     | 39 dB                            | 46 dB           | 44 dB                            | 51 dB           |
| <b>Frequency, noise and directivity</b>                 |                                  |                 |                                  |                 |
| Frequency range   | 100 – 7900 Hz                    | 100 – 8100 Hz   | 100 – 7100 Hz                    | 100 – 7400 Hz   |
| Equivalent input noise                                  | 18 dB SPL                        | 19 dB SPL       | 15 dB SPL                        | 17 dB SPL       |
| Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz | 2 / 1 / 1 / 1 %                  | 4 / 2 / 2 / – % | 3 / 1 / 1 / 1 %                  | 4 / 4 / 2 / – % |
| Tinnitus Function broadband                             | 70 dB SPL                        | –               | 70 dB SPL                        | –               |
| AI-DI   | 4.0 dB                           |                 | 4.0 dB                           |                 |
| <b>Inductive coil sensitivity</b>                       |                                  |                 |                                  |                 |
| MASL (1 mA/m) at 1.6 kHz                                | –                                | 80 dB SPL       | –                                | 84 dB SPL       |
| HFA MASL (1 mA/m)                                       | 76 dB SPL                        | –               | 81 dB SPL                        | –               |
| HFA SPLITS (left/right)                                 | 99 / 99 dB SPL                   | –               | 103 / 103 dB SPL                 | –               |
| RSETS (left/right)                                      | 0 / 0 dB                         | –               | 0 / 0 dB                         | –               |
| HFA SPLIV   | 99 dB SPL                        | –               | 103 dB SPL                       | –               |
| <b>Battery</b>  |                                  |                 |                                  |                 |
| Battery voltage   | 1.3 V                            |                 | 1.3 V                            |                 |
| Battery current drain                                   | 2.2 mA                           | 1.8 mA          | 2.0 mA                           | 1.8 mA          |
| Battery runtime (without streaming)                     | up to 132 h                      |                 | up to 136 h                      |                 |
| Battery runtime (incl. 20 h streaming)                  | up to 120 h                      |                 | up to 124 h                      |                 |
| <b>Cellphone Compatibility</b>                          |                                  |                 |                                  |                 |
| Microphone mode   | 0.65 – 0.96 GHz<br>1.4 – 2.7 GHz |                 | 0.65 – 0.96 GHz<br>1.4 – 2.7 GHz |                 |
| Telecoil mode   | 0.65 – 0.96 GHz<br>1.4 – 2.7 GHz |                 | 0.65 – 0.96 GHz<br>1.4 – 2.7 GHz |                 |

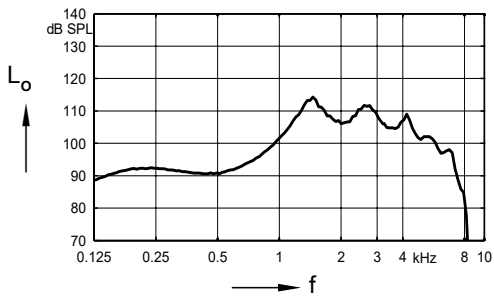
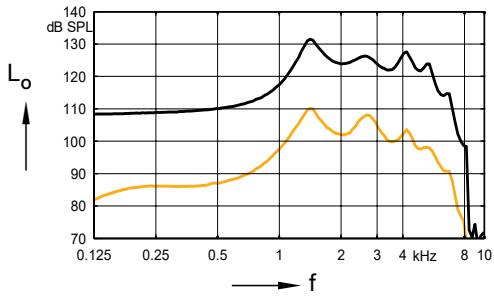
Please find additional information to the values on page “Further information”.

# BiCore B M · Fitting Range

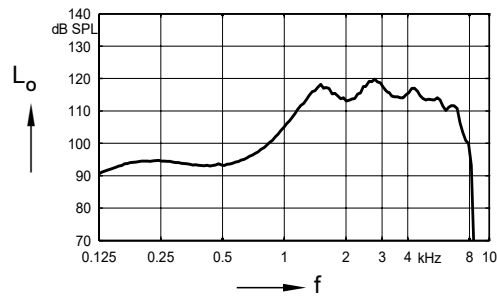
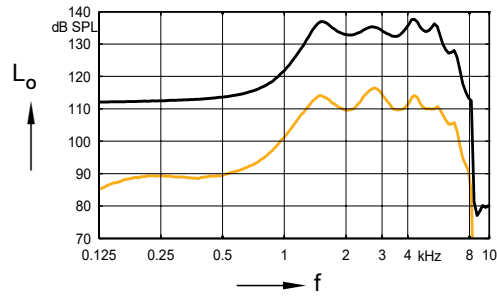


# Earhook · Basic Data

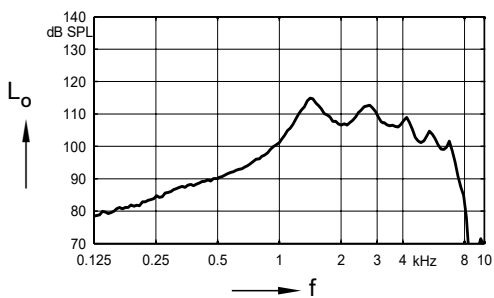
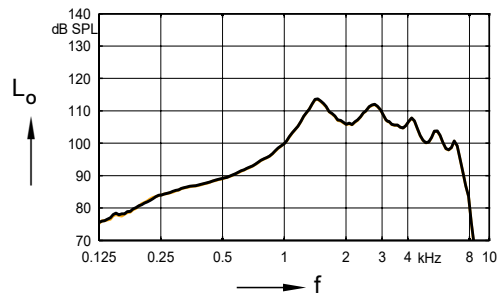
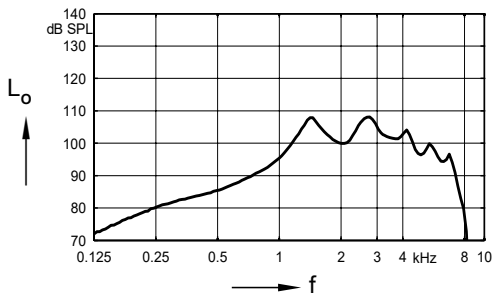
## 2 ccm coupler



## Ear simulator

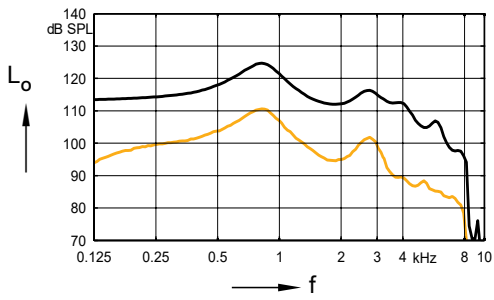


## Inductive response



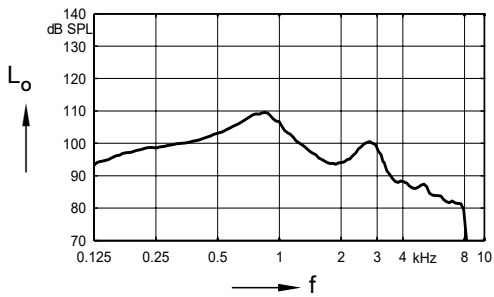
# ThinTube 3.0 · Basic Data

## 2 ccm coupler



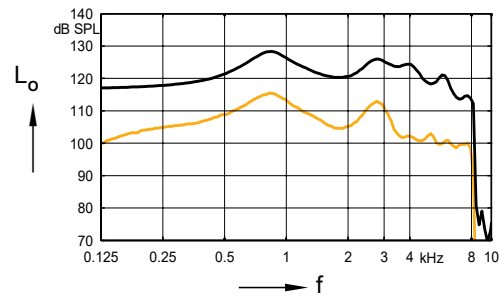
Max. Output sound pressure level  
( $L_1 = 90$  dB)

Full on gain  
( $L_1 = 50$  dB)



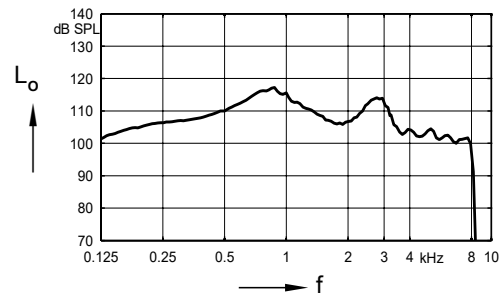
Frequency response  
( $L_1 = 60$  dB)

## Ear simulator



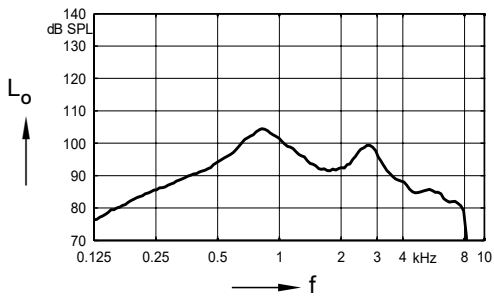
Max. Output sound pressure level  
( $L_1 = 90$  dB)

Full on gain  
( $L_1 = 50$  dB)

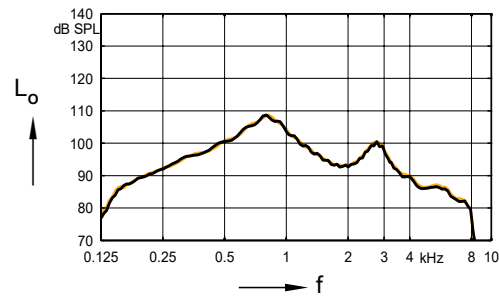


Basic acoustic response  
( $L_1 = 60$  dB)

## Inductive response

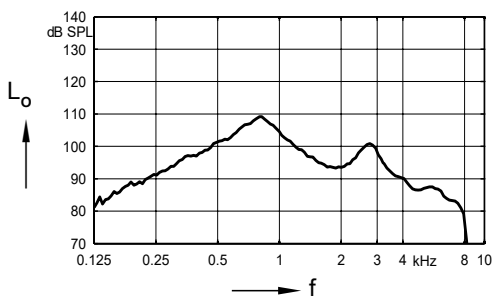


Inductive response  
( $H = 10$  mA/m)



SPLITS curve left  
( $H = 31.6$  mA/m)

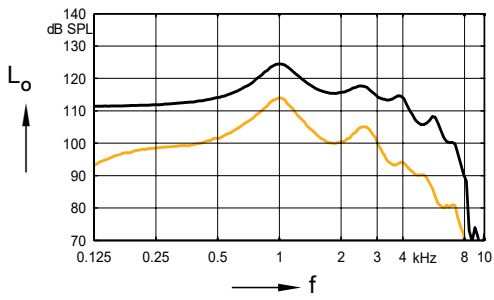
SPLITS curve right  
( $H = 31.6$  mA/m)



SPLIV curve  
( $H = 31.6$  mA/m)

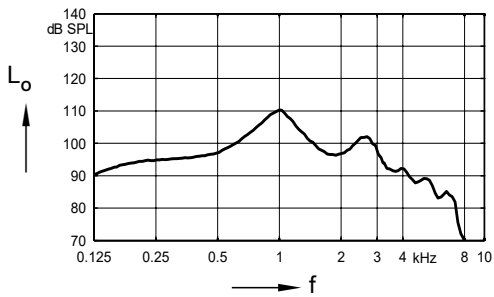
# ThinTube 3.0 P · Basic Data

## 2 ccm coupler



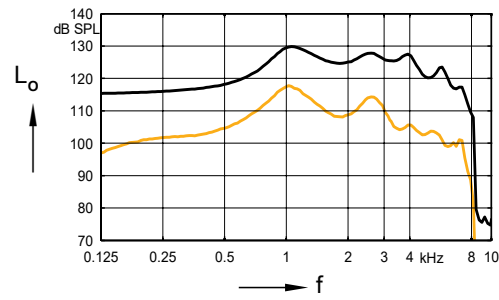
Max. Output sound pressure level  
( $L_1 = 90$  dB)

Full on gain  
( $L_1 = 50$  dB)



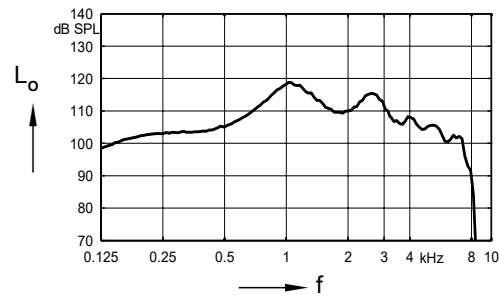
Frequency response  
( $L_1 = 60$  dB)

## Ear simulator



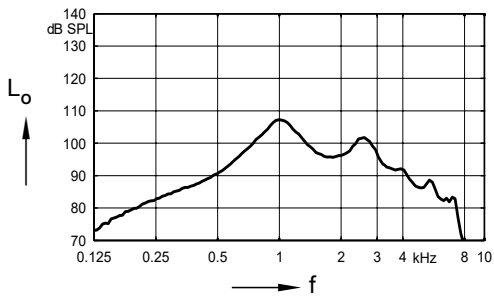
Max. Output sound pressure level  
( $L_1 = 90$  dB)

Full on gain  
( $L_1 = 50$  dB)

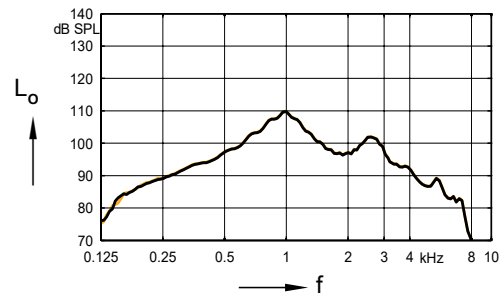


Basic acoustic response  
( $L_1 = 60$  dB)

## Inductive response

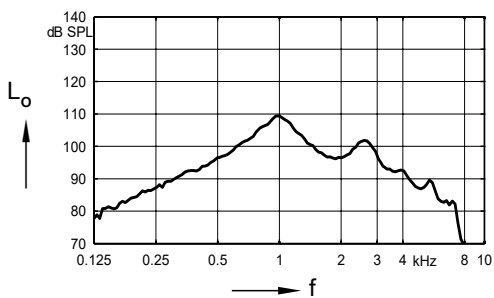


Inductive response  
( $H = 10$  mA/m)



SPLITS curve left  
( $H = 31.6$  mA/m)

SPLITS curve right  
( $H = 31.6$  mA/m)



SPLIV curve  
( $H = 31.6$  mA/m)

## BiCore B M · Features and Accessories

|  | 30   | 20   | 10                   |
|--|--|--|----------------------|
| <b>Features</b>                        |  |  |                      |
| Ingress Protection Rating              | IP68   | IP68   | IP68                 |
| Channels / Controls / Programs         | 16 / 8 / 4   | 16 / 8 / 4   | 12 / 6 / 4           |
| Soundpro 2.0                           | High Res   | High Res   | High Res             |
| My Voice 2.0<br>(Own Voice Processing) | —  | —  | —                    |
| Direct Streaming                       | Made for iPhone/<br>Android version 10 or higher<br>(ASHA) | Made for iPhone/<br>Android version 10 or higher<br>(ASHA) | —                    |
| Headset Mode for iOS                   | —  | —  | —                    |
| Auto Volume                            | ●  | ●  | —                    |
| Wireless Sync                          | ●  | ●  | ●                    |
| Directionality                         | Automatic adaptive,<br>iOmni                               | Automatic adaptive,<br>iOmni                               | Automatic fixed omni |
| Noise Reduction                        | Noise Management,<br>SoundSmoothing                        | Noise Management   | Noise Management     |
| Wind Noise Reduction                   | ●  | —  | —                    |
| Auto Echo Reducer                      | —  | —  | —                    |
| Reverb Reducer                         | —  | —  | —                    |
| Bandwidth: Extension/Compression       | — / ●  | — / ●  | — / —                |
| Music Enhancer (presets)               | 1  | —  | —                    |
| Tinnitus Function                      | Sound Therapy,<br>Notch Therapy                            | —  | —                    |
| XPhone                                 | ●  | ●  | —                    |
| Acclimatization / Data Logging         | ● / ●  | ● / ●  | — / ●                |
| T-Coil                                 | ●  | ●  | ●                    |
| Battery door – tamper proof            | ○  | ○  | ○                    |
| Battery size                           | 13   | 13   | 13                   |
| <b>Accessories</b>                     |  |  |                      |
| Smart Key                              | ○  | ○  | ○                    |
| Smart Transmitter 2,4                  | ○  | ○  | —                    |
| Smart Mic                              | ○  | ○  | —                    |
| Rexton APP                             | ○  | ○  | ○                    |
| Noahlink Wireless                      | mandatory  | mandatory  | mandatory            |
| Small earhook                          | ○  | ○  | ○                    |
| BiCore CROS R-Li                       | ○  | ○  | —                    |
| BiCore CROS R312                       | ○  | ○  | —                    |
| BiCore CROS SR                         | —  | —  | —                    |

● available — not available ○ optional



# BiCore B M · Further information

## Abbreviations

The following abbreviations are used in this datasheet:

|        |   |
|--------|---|
| SPL    | Sound Pressure Level                                |
| OSPL   | Output Sound Pressure Level                         |
| HFA    | High Frequency Average                              |
| FOG    | Full-On Gain  |
| MASL   | Magneto Acoustical Sensitivity Level                |
| SPLITS | Coupler SPL for an Inductive Telephone Simulator    |
| RSETS  | Relative Simulated Equivalent Telephone Sensitivity |
| SPLIV  | SPL In a Vertical magnetic field                    |
| AI-DI  | Articulation Index - Directivity Index              |
| IRIL   | Input Related Interference Level                    |
| RTF    | Reference Test Frequency                            |
| ASHA   | Audio streaming for hearing aids                    |


## Standards and additional information

- All measurements with the 2 ccm coupler were performed according to ANSI S3.22-2014 and IEC 60118-0:2015 if applicable.
- All measurements with an ear simulator were performed according to IEC 60118-0:1983 + A1:1994 and to DIN 45605 (frequency range) if applicable.
- All Cellphone Compatibility measurements were performed according to IEC 60118-13:2019, EN IEC 60118-13:2020 and ANSI C63.19-2019.
- Cellphone Compatibility definition: It is expected that the hearing aid user can effectively use a compliant wireless device held in a talking position at the ear. Maximum achievable Cellphone Compatibility range: 0.65–0.96 GHz and 1.4–2.7 GHz.
- Curves and figures representing FOG are measured with 20 dB reduction and 70 dB SPL input level.
- Figures representing Equivalent Input Noise incorporate a moderate expansion.
- Tinnitus noiser measurement conditions: all tinnitus single frequency sliders in max position, master volume slider in default position (0 dB) and local volume control in default position.
- Inductive coil sensitivity values, inductive response curves and T ratings apply for instruments with telecoil only.
- The current consumption is measured in reference test setting (RTS) according to the applicable standards. Due to the settling behaviour of hearing aids supporting RF (radio frequency), the battery current is measured 3 minutes after turning on (note: no pairing).
- The battery runtime is based on first fit settings using 60 % of the fitting range and an ISTS (International Speech Test Signal) input signal at 65 dB SPL (note: pairing established). The actual battery runtime is determined by battery quality, hearing loss, sound environment, usage and activated feature set. Regarding RF usage, Bluetooth audio streaming from phone to hearing aid and from hearing aid to phone are considered.
- Extended bandwidth up to 10 kHz for 80 devices only.
- The following acoustic connections/ear pieces were used:
  - Earhook
  - ThinTube 3.0
  - ThinTube 3.0 P



“Made for iPhone”, “Made for iPad”, and “Made for iPod” mean that an electronic accessory has been designed to connect specifically to iPhone, iPad, or iPod, respectively, and has been certified by the developer to meet Apple performance standards. Apple is not responsible for the operation of this device or its compliance with safety and regulatory standards. Please note that the use of this accessory with iPhone, iPad, or iPod may affect wireless performance.

The information in this document contains general descriptions of the technical options available, which do not always have to be present in individual cases and are subject to change without prior notice. The required features should therefore be specified in each individual case at the time of conclusion of the respective contract.

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Subject to change  
without prior notice

 **WARNING**

Choking hazard posed by small parts.

- ▶ This instrument is not intended for the fitting of infants, children under 3 years or persons of mental incapacity.

 **WARNING**

Instrument has an output sound pressure level of 132 dB SPL or more. Risk of impairing the residual hearing of the user.

- ▶ Take special care when fitting this instrument.