RIC HEARING SYSTEMS

R Li 7

Tech Level	16 | 12 | 8 | 6 | 4 | tune

Made for iPhone | iPad | iPod

Battery: Lithium-ion
Amplification: 46 dB | 60 dB | 65 dB | 75 dB

Data sheet also applicable for R Li D 7

R Li 7 | Technical Data

Type	S-Receiver		M-Receiver	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
OSPL 90 at 1.6 kHz	–	110 dB SPL	–	123 dB SPL
OSPL 90 (Peak)	110 dB SPL	120 dB SPL	119 dB SPL	129 dB SPL
HFA-OSPL 90	102 dB SPL	–	115 dB SPL	–
Gain				
FOG at 1.6 kHz	–	44 dB	–	58 dB
FOG (peak)	46 dB	56 dB	60 dB	70 dB
HFA-FOG	38 dB	–	51 dB	–
Reference test gain	25 dB	35 dB	38 dB	48 dB
Frequency, noise and directivity				
Frequency range TL 16 TL 12 | 8 | 6 | 4	100 – 10000 Hz 100 – 8200 Hz	100 – 10000 Hz 100 – 8300 Hz	100 – 9500 Hz 100 – 8200 Hz	100 – 10000 Hz 100 – 8300 Hz
Equivalent input noise	16 dB SPL	19 dB SPL	16 dB SPL	19 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	1 / 1 / 1 / 1 %	1 / 1 / 2 / – %	1 / 1 / 1 / 1 %	2 / 2 / 3 / – %
Tinnitus Function broadband	65 dB SPL	–	70 dB SPL	–
AI-DI	4.0 dB		4.0 dB	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	–	–	–
HFA MASL (1 mA/m)	–	–	–	–
HFA SPLITS (left/right)	–	–	–	–
RSETS (left/right)	–	–	–	–
HFA SPLIV	–	–	–	–
Battery				
Battery runtime (without streaming)	up to 28 h		up to 28 h	
Battery runtime (incl. 5 h streaming)	up to 24 h		up to 24 h	
Cellphone Compatibility				
Microphone mode	0.65 – 0.96 GHz 1.4 – 2.7 GHz		0.65 – 0.96 GHz 1.4 – 2.7 GHz	
Telecoil mode	–		–	

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

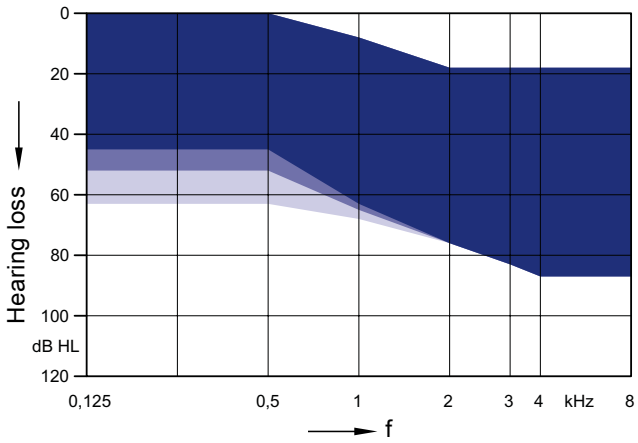
R Li 7 | Technical Data

Type	P-Receiver		HP-Receiver	
	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
Output sound pressure level				
OSPL 90 at 1.6 kHz	–	129 dB SPL	–	136 dB SPL
OSPL 90 (peak)	122 dB SPL	131 dB SPL	131 dB SPL	138 dB SPL
HFA-OSPL 90	120 dB SPL	–	124 dB SPL	–
Gain				
FOG at 1.6 kHz	–	69 dB	–	82 dB
FOG (peak)	65 dB	75 dB	75 dB	83 dB
HFA-FOG	61 dB	–	69 dB	–
Reference test gain	43 dB	54 dB	47 dB	61 dB
Frequency, noise and directivity				
Frequency range TL 16 TL 12 | 8 | 6 | 4	100 – 7400 Hz 100 – 7400 Hz	100 – 8000 Hz 100 – 8000 Hz	100 – 7700 Hz 100 – 7700 Hz	200 – 7500 Hz 200 – 7500 Hz
Equivalent input noise	14 dB SPL	16 dB SPL	15 dB SPL	8 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	1 / 2 / 1 / 1 %	2 / 3 / 3 / – %	1 / 2 / 1 / 1 %	2 / 3 / 2 / – %
Tinnitus Function broadband	75 dB SPL	–	85 dB SPL	–
AI-DI	4.0 dB		4.0 dB	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	–	–	–
HFA MASL (1 mA/m)	–	–	–	–
HFA SPLITS (left/right)	–	–	–	–
RSETS (left/right)	–	–	–	–
HFA SPLIV	–	–	–	–
Battery				
Battery runtime (without streaming)	up to 28 h		up to 28 h	
Battery runtime (incl. 5 h streaming)	up to 24 h		up to 24 h	
Cellphone Compatibility				
Microphone mode	0.65 – 0.96 GHz 1.4 – 2.7 GHz		0.65 – 0.96 GHz 1.4 – 2.7 GHz	
Telecoil mode	–		–	

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

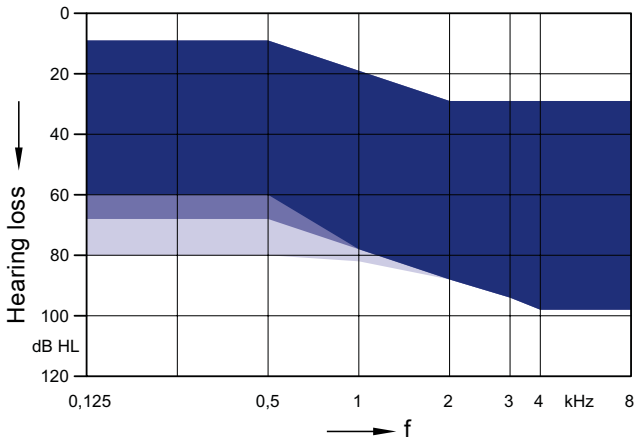
R Li 7 | Fitting Range

S-Receiver



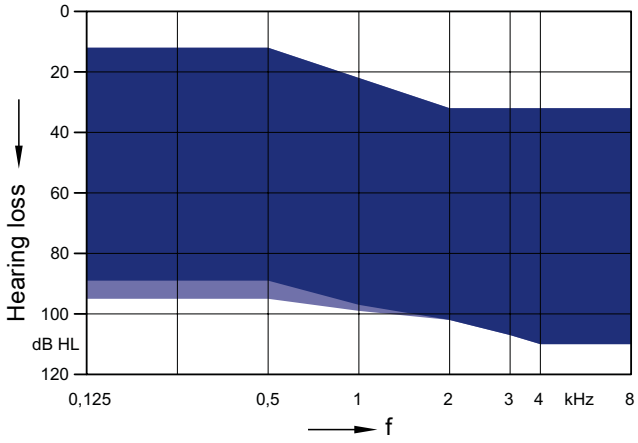
Eartip 3.0 open
\+ Sleeve 3.0 Power
\+ \+ Earmold 3.0

M-Receiver



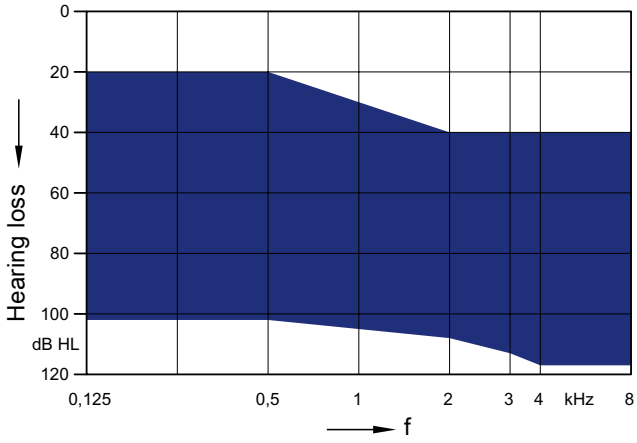
Eartip 3.0 open
\+ Sleeve 3.0 Power
\+ \+ Earmold 3.0

P-Receiver



Sleeve 3.0 Power
\+ Earmold 3.0

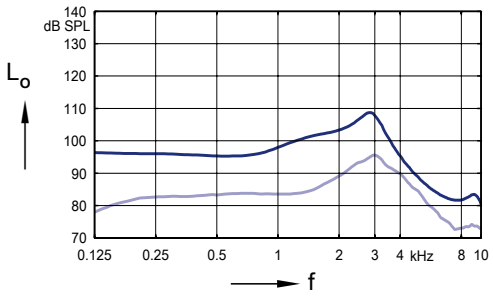
HP-Receiver



Custom Shell (no vent)

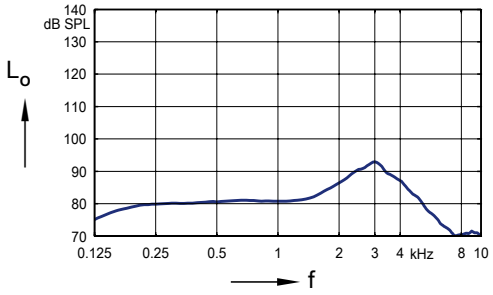
S-Receiver (Sleeve 3.0 Power) | Basic Data

2 ccm coupler



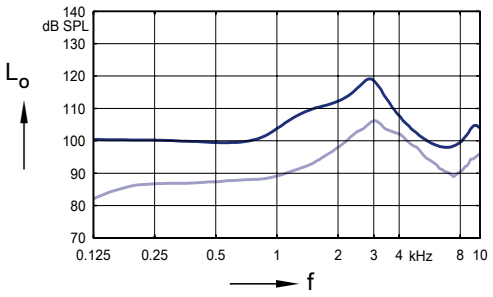
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)



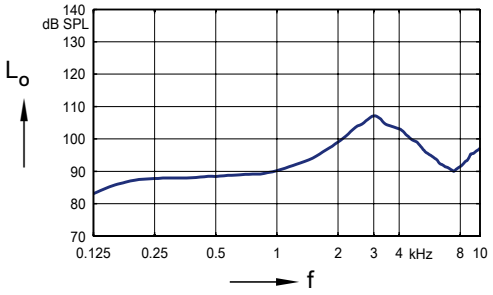
Frequency response (L_I = 60 dB)

Ear simulator



Max. Output sound pressure level (L_I = 90 dB)

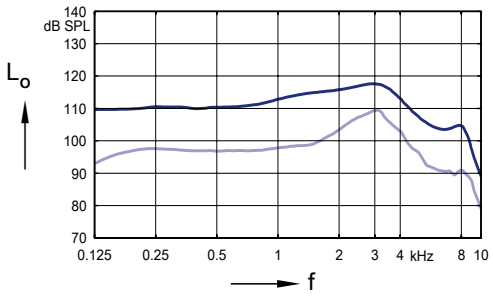
Full on gain (L_I = 50 dB)



Basic acoustic response (L_I = 60 dB)

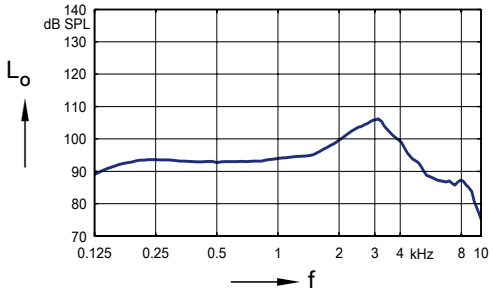
M-Receiver (Sleeve 3.0 Power) | Basic Data

2 ccm coupler



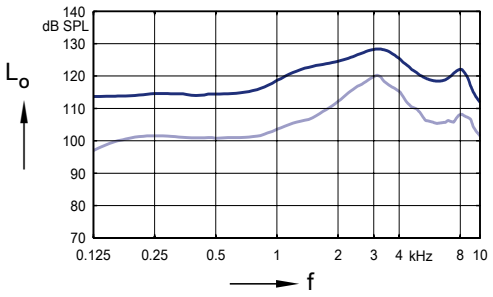
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)



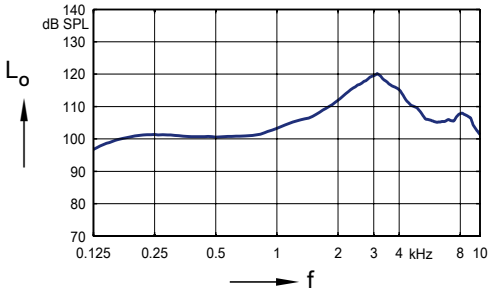
Frequency response (L_I = 60 dB)

Ear simulator



Max. Output sound pressure level (L_I = 90 dB)

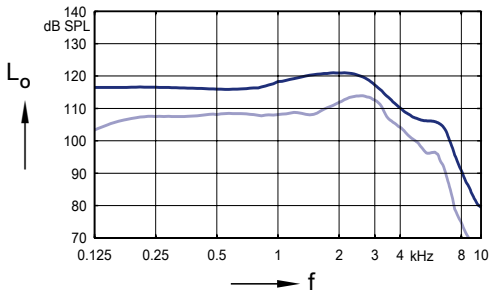
Full on gain (L_I = 50 dB)



Basic acoustic response (L_I = 60 dB)

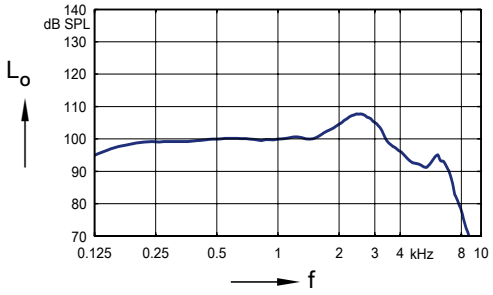
P-Receiver (Earmold 3.0) | Basic Data

2 ccm coupler



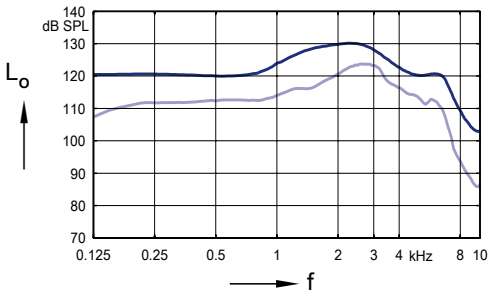
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)



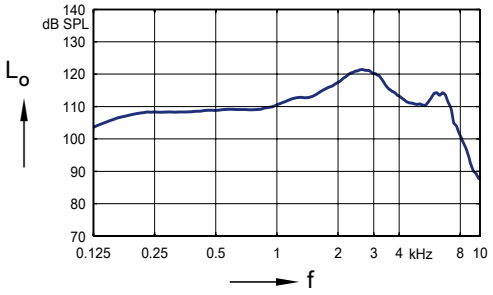
Frequency response (L_I = 60 dB)

Ear simulator



Max. Output sound pressure level (L_I = 90 dB)

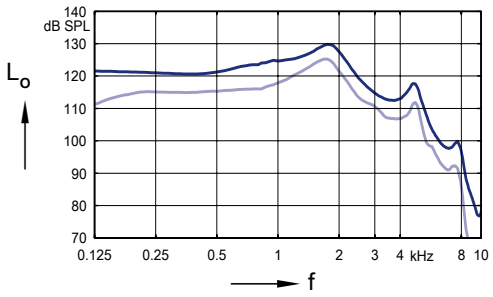
Full on gain (L_I = 50 dB)



Basic acoustic response (L_I = 60 dB)

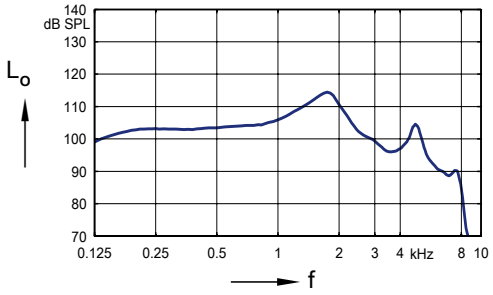
HP-Receiver (Custom Shell) | Basic Data

2 ccm coupler



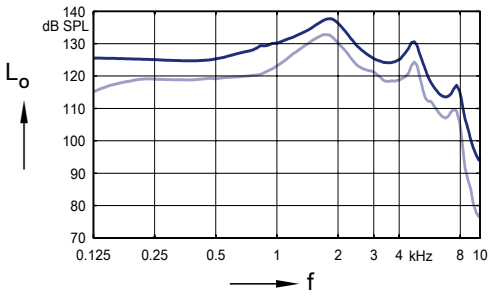
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)



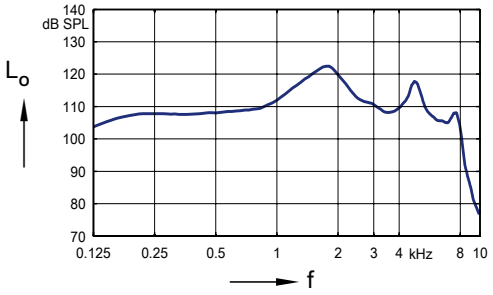
Frequency response (L_I = 60 dB)

Ear simulator



Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)



Basic acoustic response (L_I = 60 dB)

R Li 7 | Features and Accessories

	TL 16	TL 12	TL 8	TL 6	TL 4
Features					
Ingress Protection Rating	IP68	IP68	IP68	IP68	IP68
Channels / Controls / Programs	48 / 20 / 6	32 / 16 / 6	24 / 12 / 6	16 / 8 / 4	16 / 8 / 4
Comformatic 2.0	HiRes	HiRes	HiRes	HiRes	HiRes
Occlumatic	●	●	●	—	—
Direct Audio Streaming	Made for iPhone / Android version 10 or higher (ASHA)	Made for iPhone / Android version 10 or higher (ASHA)	Made for iPhone / Android version 10 or higher (ASHA)	Made for iPhone / Android version 10 or higher (ASHA)	Made for iPhone / Android version 10 or higher (ASHA)
Auto Volume	●	●	●	●	●
Binaural Synchronization	●	●	●	●	●
Directionality	Automatic Adaptive, Panorama, Front / Back / Left / Right automatic & manual, Narrow	Automatic Adaptive, Panorama, Front / Back automatic & manual, Left / Right manual, Narrow	Automatic Adaptive, Panorama, Narrow	Automatic Adaptive, Panorama	Automatic Adaptive, Panorama
Noise Reduction	Noise Management, Impulse suppressor, Directional	Noise Management, Impulse suppressor, Directional	Noise Management, Impulse suppressor	Noise Management, Impulse suppressor	Noise Management
Wind Noise Reduction	●	●	●	●	—
EchoClear / Dereverberation	●	●	—	—	—
HiFi functionality / Selective frequency compression	● / ●	— / ●	— / ●	— / ●	— / ●
Music	●	●	—	—	—
Tinnitus	Sound Therapy, Notch Therapy	Sound Therapy, Notch Therapy	Sound Therapy, Notch Therapy	Sound Therapy, Notch Therapy	—
2earPhone	●	●	●	●	●
Acclimatic / Data Logging	● / ●	● / ●	● / ●	● / ●	● / ●
T-Coil	—	—	—	—	—
Small earhook	—	—	—	—	—
Accessories					
Smart Key	○	○	○	○	○
Smart Transmitter 2,4	○	○	○	○	○
Smart Mic	○	○	○	○	○
Audio Service App	○	○	○	○	○
Travel Charger RIC / Charging Station R / Charging+ Station R	Mandatory	Mandatory	Mandatory	Mandatory	Mandatory
CROS R Li 7	○	○	○	○	○
CROS R S 7	○	○	○	○	○
CROS SR Li 7	—	—	—	—	—

● available — not available ○ optional

R Li 7 | 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 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 118-0/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 streaming) two different conditions are considered.
- Extended bandwidth up to 10 kHz for TL 16 devices only.
- The following acoustic connections / ear pieces were used:
  - S-Receiver Unit and M-Receiver Unit: Sleeve 3.0 Power
  - P-Receiver Unit: Earmold 3.0
  - HP-Receiver Unit: Custom Shell

Special note for instruments with built-in lithium-ion rechargeable battery

- The runtime of all lithium-ion rechargeable batteries reduces over time. The estimates are based on fresh lithium-ion rechargeable battery capacity. Under normal operating conditions, the battery will retain up to 80 % of its initial capacity after 3 years of use. Please note that battery performance will vary depending on individual usage patterns and environmental conditions.

Made for iPhone | iPad | iPod

“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.

Legal Manufacturer
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Denmark

CE
0123

Order No. 04704-99T03-7600

www.audioservice.com

⚠ **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.