TruHearing®

TH Premium/Advanced Power BTE 19

Technical Data

Made for iPhone | iPad | iPod

Earhook

- 81 dB / 141 dB SPL (ear simulator)
- 77 dB / 135 dB SPL (2 ccm coupler)

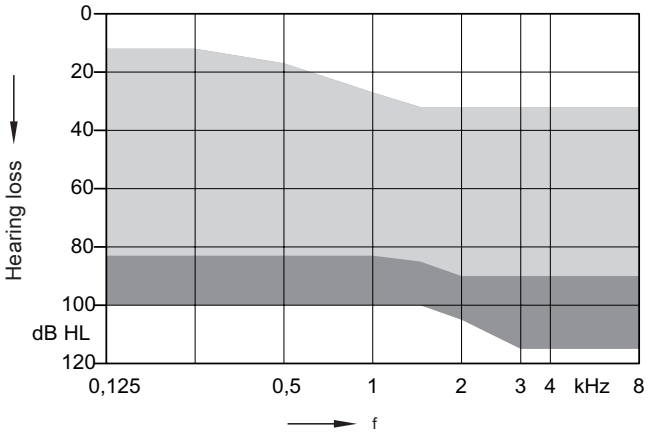
ThinTube

- 68 dB / 133 dB SPL (ear simulator)
- 65 dB / 130 dB SPL (2 ccm coupler)

TH Premium/Advanced Power BTE 19 | Technical Data

Type	Earhook		ThinTube	
				
Output sound pressure level	**2 ccm coupler**	**Ear simulator**	**2 ccm coupler**	**Ear simulator**
at 1.6 kHz	–	138 dB SPL	–	128 dB SPL
Peak	135 dB SPL	141 dB SPL	130 dB SPL	133 dB SPL
HFA-OSPL 90	129 dB SPL	–	118 dB SPL	–
Gain				
Full on gain (FOG) at 1.6 kHz	–	76 dB	–	61 dB
Full on gain (Peak)	77 dB	81 dB	65 dB	68 dB
HFA-FOG	70 dB	–	55 dB	–
Reference test gain	52 dB	62 dB	41 dB	52 dB
Frequency, noise and directivity				
Frequency range	100 - 6000 Hz	120 - 5900 Hz	100 - 5800 Hz	100 - 5900 Hz
Equivalent input noise	18 dB SPL	17 dB SPL	21 dB SPL	19 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	4 / 3 / 1 / 1 %	5 / 4 / 1 / – %	2 / 2 / 1 / 1 %	2 / 2 / 2 / – %
Tinnitus therapy broadband	80 dB SPL	–	80 dB SPL	–
AI-DI	4.0 dB		4.0 dB	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	105 dB SPL	–	93 dB SPL
HFA MASL (1 mA/m)	99 dB SPL	–	85 dB SPL	–
HFA SPLITS (left/right)	109 / 109 dB SPL	–	99 / 99 dB SPL	–
RSETS (left/right)	-3 / -3 dB	–	-2 / -2 dB	–
HFA SPLIV	111 dB SPL	–	101 dB SPL	–
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	2.0 mA	2.0 mA	1.7 mA	1.7 mA
Battery life (cell zinc air)	~120 h		~130 h	
Battery life (rechargeable)	–		–	
IRIL IEC 60118-13:2016 Ed. 4.0				
700-960 MHz (rating)	user		user	
1400-2000 MHz (rating)	user		user	
2000-2700 MHz (rating)	user		user	
ANSI C63.19-2011				
800-950 MHz (rating)	M4 / T4		M4 / T4	
1600-2500 MHz (rating)	M4 / T4		M4 / T4	

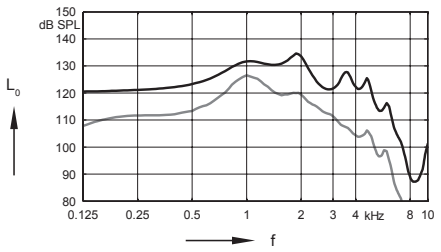
TH Premium/Advanced Power BTE 19 | Fitting Range



ThinTube double tip
\+
Earhook

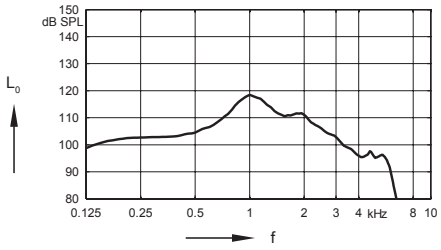
Earhook | Basic Data

2 ccm coupler



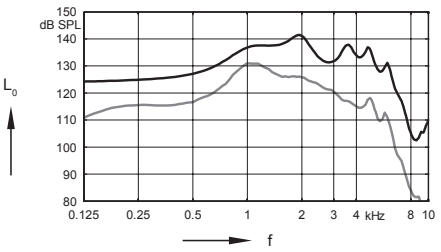
Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)



Frequency response (L_I = 60 dB)

Ear simulator



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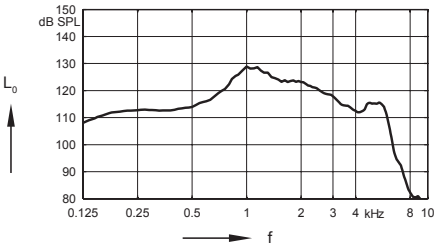
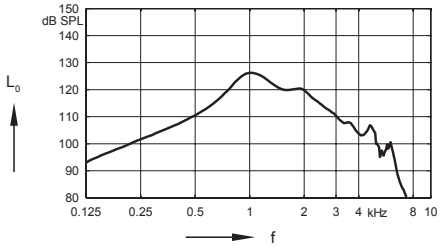
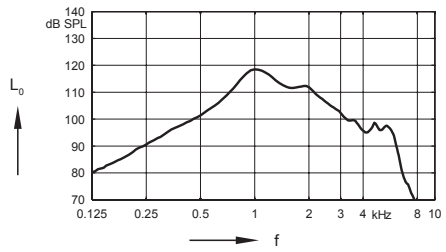


Basic acoustic response (L_I = 60 dB)

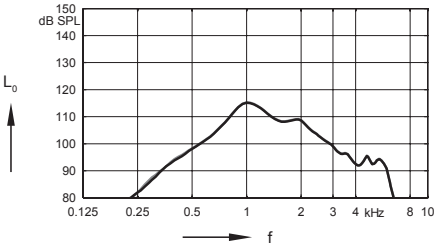
Inductive response



Inductive response (H = 10 mA/m)



SPLIV curve (H = 31.6 mA/m)

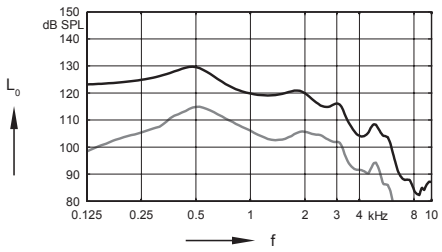


SPLITS curve left (H = 31.6 mA/m)

SPLITS curve right (H = 31.6 mA/m)

ThinTube | Basic Data

2 ccm coupler



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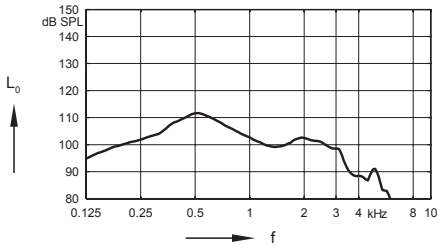
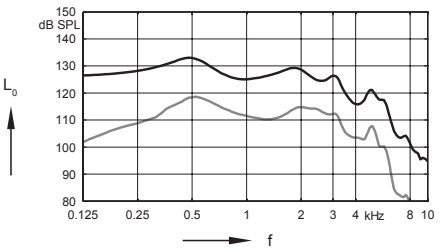
Full on gain (L_I = 50 dB)



Frequency response (L_I = 60 dB)

Ear simulator



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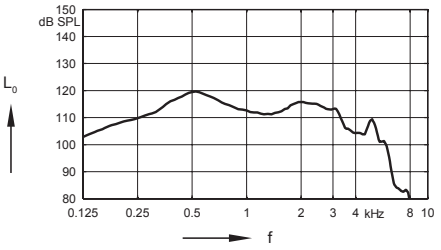
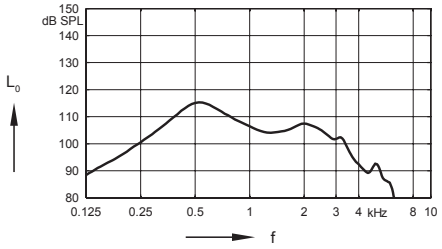
Full on gain (L_I = 50 dB)

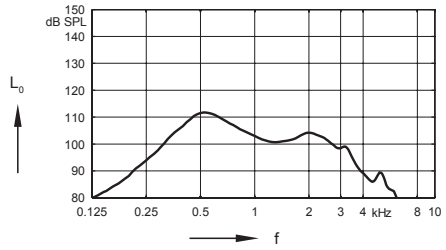


Basic acoustic response (L_I = 60 dB)

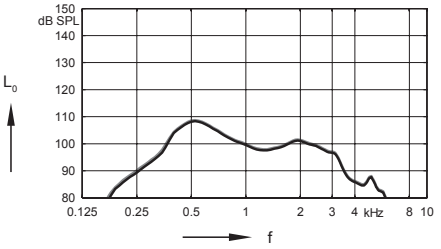
Inductive response



Inductive response (H = 10 mA/m)



SPLIV curve (H = 31.6 mA/m)



SPLITS curve left (H = 31.6 mA/m)

SPLITS curve right (H = 31.6 mA/m)

TH Premium/Advanced Power BTE 19 | Features and Accessories

	Premium	Advanced
Audiology		
Own Voice Processing (OVP) [1]	■■■■■	■■■■■
3D Classifier	■■■■■	■■■■
Signal processing (channels) / Gain/MPO (handles)	48 / 20	32 / 16
Hearing programs	6	6
Sound Clarity		
HD Spatial	●	●
Extended dynamic range	●	●
Extended bandwidth	●	—
EchoShield	●	—
HD Music (presets)	3	1
eWindScreen® binaural [1] [2]	●	●
eWindScreen	●	●
Noise Management		
Speech and noise management (steps)	7	5
SoundSmoothing® (steps)	3	3
Directional speech enhancement (steps)	3	1
Feedback cancellation	●	●
Speech Quality		
Directionality		
Narrow Directionality [1]	●	●
Spatial SpeechFocus [1] [3]	●	●
SpeechFocus	●	●
TwinPhone[1]	●	●
Frequency compression	●	●
Direct Streaming		
Made for iPhone®	●	●
Adaptive Streaming Volume [4]	●	●
Tinnitus		
Notched Noise Therapy	●	●
Tinnitus therapy	●	●
Fitting		
Smart Optimizer and Data Logging	●	●
Acclimatization manager	●	●
Performance Guide	●	●
Insitugram	●	●
Learning (classes)	6	3
TeleCare		
TeleCare 3.0	●	●

[1] req. bilateral fitting
[2] not available in the universal program on Advanced
[3] for Advanced in Stroll Program or with Spatial Configurator only
[4] streaming only

● available ■■■■■ highest feature performance — not available

TH Premium/Advanced Power BTE 19 | Features and Accessories

	Premium / Advanced
Style specific features	
Ingress Protection Rating	IP68
Charging contacts	—
Battery Size	13
Battery door on/off function	●
Nanocoated housing	●
e2e wireless® 3.0	●
User controls coupling via e2e	●
Wireless programming	●
Instrument configurations	
Flat cover	—
Rotary volume control	—
Push button	—
Rocker switch	●
Color conversion kit	○
Battery door – integrated telecoil	○
Battery door – child lock	—
Small earhook	○
Programming accessories	
ConnexxAir, ConnexxLink	—
Noahlink™ Wireless	●
Programming adapter / cable	size 13
Accessories	
miniPocket®	○
TH CROS RIC 19	○
StreamLine TV	○
StreamLine Mic	○
Apps	
myControl™ App	○
touchControl™ App	○

● available ○ optional — not available

Notes

Abbreviations and Standards

Abbreviations

The following abbreviations are used in this datasheet:

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

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.
- ▶ 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.
- ▶ Inductive coil sensitivity values, inductive response curves and T ratings apply for instruments with telecoil battery door only.
- ▶ Tinnitus therapy 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.
- ▶ The current consumption is measured in reference test setting (RTS) according to the applicable standards. Due to the settling behaviour of hearing instruments supporting RF (radio frequency), the battery current is measured 3 minutes after turning on (note: no pairing).
- ▶ The battery life 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 life is determined by battery quality, hearing loss, sound environment, usage and activated feature set.
- ▶ The following acoustic connections / ear pieces were used:
  - Earhook
  - ThinTube
- ▶ Extended frequency range up to 12 kHz for Premium devices only.

Made for iPhone | iPad | iPod

“Made for iPod”, “Made for iPhone”, and “Made for iPad” mean that an electronic accessory has been designed to connect specifically to iPod, iPhone, or iPad, 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 iPod, iPhone, or iPad 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.

Manufactured for
TruHearing Inc.
12936 S. Frontrunner Blvd
Draper, UT 84020
United States

Order No. 03803-99T1-7600, SI/18937-19

www.truhearing.com

Warning
Choking hazard posed by small parts.
- ▶ This instrument is not intended for the fitting of infants, children under 3 years and 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.

Power BTE 19: Premium/Advanced
Behind-the-Ear Hearing Instrument

All data specified were determined under test conditions which comply with the Specifications of Hearing Aid Characteristics ANSI S3.22 — 2014.

Hearing aid test settings according to the test mode, selectable from the CONNEXX® fitting menu, configures the instrument for full-on gain, no compression and all adaptive signal analysis and processing turned off.

*SPLITS (Sound Pressure Level for Inductive Telecoil Simulator)

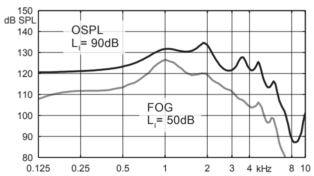
Battery life stated is measured at 65 dB input and reference test gain.

Actual battery life depends on the output level.

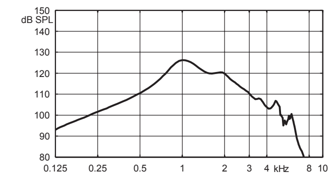
All tests performed with earhook (damped).

Standard ANSI S3.22 - 2014		2 ccm coupler
Output	Peak OSPL 90 HF - average OSPL 90	135 dB 129 dB
Full-on gain	Peak HF - average Reference test gain	77 dB 70 dB 52 dB
Frequency range	Low frequency limit High frequency limit	100 Hz 6000 Hz
Total harmonic distortion	500 Hz 800 Hz 1600 Hz 3200 Hz	4% 3% 1% 1%
Induction coil sensitivity (HFA-SPLITS*)		109/ 109 dB
Equivalent input noise		18 dB
Battery current drain		2.0 mA
Battery life (typical) #13 zinc air battery		~120 hrs.

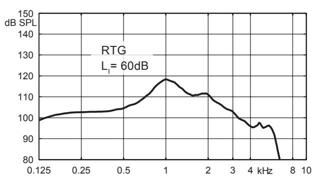
Output Sound Pressure Level
ANSI S3.22-2014



Inductive Response
ANSI S3.22-2014



Frequency Response
ANSI S3.22-2014



Hearing Instruments made in Singapore.

10240790 1/18 1.0 SI/18929-18

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Full-on gain | Peak / HF - average / Reference test gain | 77 dB / 70 dB / 52 dB
Frequency range | Low frequency limit / High frequency limit | 100 Hz / 6000 Hz
Total harmonic distortion | 500 Hz / 800 Hz / 1600 Hz / 3200 Hz | 4% / 3% / 1% / 1%
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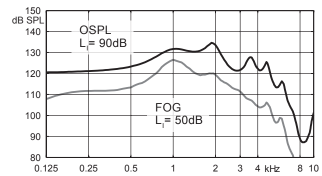
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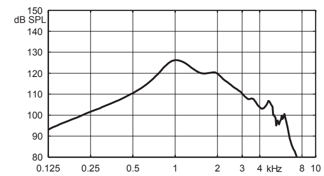
ANSI S3.22-2014

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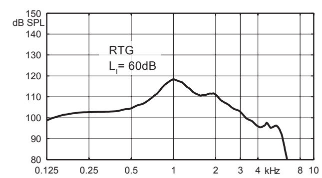

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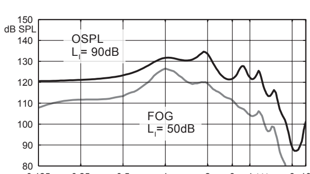
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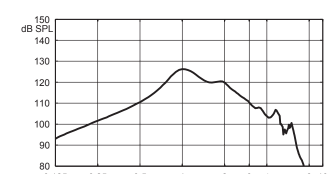
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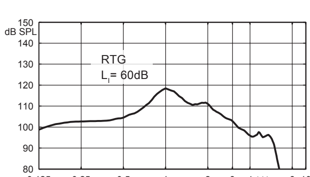

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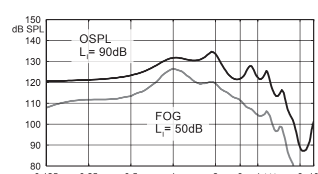
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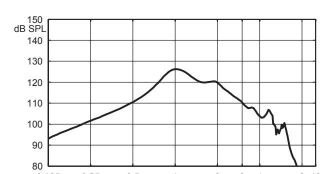
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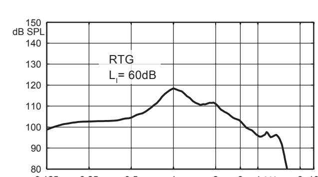

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