

**Essential Facts**

- 8 signal processing channels
- 4 gain handles
- 4 hearing programs

**Hardware**

- 312 battery
- Push button
- SecureTec Protection (IP67 Rating)

**Speech**

- Feedback Preventer (Standard Functionality)
- Fixed Directional Microphone (Standard Functionality)

**Sound Comfort and Convenience**

- Noise Management (Basic Functionality)

**Automatic Optimization**

- Automatic Classifier (Basic Functionality)
- Data Logging (Standard Functionality)

**Accessories**

- Smart Remote App

## XTM S P4

Data Sheet

<http://www.am-hearing.com>



#### **Essential Facts**

- 8 signal processing channels
- 4 gain handles
- 4 hearing programs

#### **Hardware**

- 13 battery
- Push button
- Rocker Switch
- Telecoil
- Direct audio input via exchangeable battery door

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## **XTM P P4**

Data Sheet

<http://www.am-hearing.com>

**Essential Facts**

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## XTM XP P4


Data Sheet

<http://www.am-hearing.com>


# XTM S P4 | Technical Data

Type	Earhook damped		ThinTube	
				
Output sound pressure level	2 ccm coupler	Ear simulator	2 ccm coupler	Ear simulator
at 1.6 kHz	–	129 dB SPL	–	116 dB SPL
Peak	124 dB SPL	132 dB SPL	124 dB SPL	125 dB SPL
HFA-OSPL 90	121 dB SPL	–	113 dB SPL	–
Gain				
Full on gain (FOG) at 1.6 kHz	–	49 dB	–	48 dB
Full on gain (Peak)	55 dB	62 dB	45 dB	53 dB
HFA-FOG	42 dB	–	41 dB	–
Reference test gain	42 dB	42 dB	36 dB	41 dB
Frequency, noise and directivity				
Frequency range	100-7100 Hz	1000-7100 Hz	100-7100 Hz	280-7100 Hz
Equivalent input noise	20 dB SPL	23 dB SPL	15 dB SPL	15 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	2 / 1 / 1 %	2 / 1 / 1 %	1 / 1 / 2 %	1 / 1 / 2 %
Broadband tinnitus function	–	–	–	–
AI-DI	3.5 dB		3.5 dB	
Inductive coil sensitivity				
MASL (1 mA/m) at 1.6 kHz	–	–	–	–
HFA MASL (1 mA/m)	–	–	–	–
HFA SPLITS (left/right)	–	–	–	–
RSETS (left/right)	–	–	–	–
Battery				
Battery voltage	1.3 V		1.3 V	
Battery current drain	0.9 mA		0.9 mA	
Battery life (cell zinc air)	~125 h		~125 h	
Battery life (rechargeable)	–		–	
IRIL IEC 118-13:2011 (bystander)				
800-960 MHz	<-10 dB SPL		<-10 dB SPL	
1400-2000 MHz	<-10 dB SPL		<-10 dB SPL	
ANSI C63.19	M3		M3	

# XTM P P4 | Technical Data

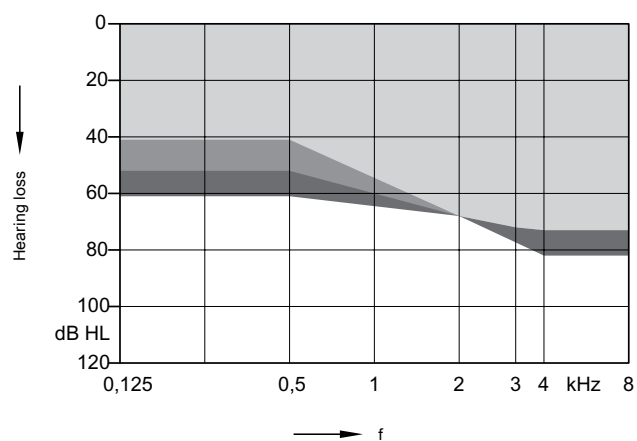
Type	Earhook undamped	
		
Output sound pressure level	2 ccm coupler	Ear simulator
at 1.6 kHz	–	133 dB SPL
Peak	134 dB SPL	138 dB SPL
HFA-OSPL 90	127 dB SPL	–
Gain		
Full on gain (FOG) at 1.6 kHz	–	69 dB
Full on gain (Peak)	70 dB	75 dB
HFA-FOG	64 dB	–
Reference test gain	50 dB	58 dB
Frequency, noise and directivity		
Frequency range	110-6000 Hz	170-6700 Hz
Equivalent input noise	24 dB SPL	24 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	3 / 2 / 1 %	4 / 4 / 1 %
Broadband tinnitus function	–	–
AI-DI	3.5 dB	
Inductive coil sensitivity		
MASL (1 mA/m) at 1.6 kHz	–	97 dB SPL
HFA MASL (1 mA/m)	93 dB SPL	–
HFA SPLITS (left/right)	110 / 107 dB SPL	–
RSETS (left/right)	0 / -3 dB	–
Battery		
Battery voltage	1.3 V	
Battery current drain	1.4 mA	
Battery life (cell zinc air)	~160 h	
Battery life (rechargeable)	–	
IRIL IEC 118-13:2011 (bystander)		
800-960 MHz	<-35 dB SPL	
1400-2000 MHz	<-24 dB SPL	
ANSI C63.19	M3 / T3	

# XTM XP P4 | Technical Data

Type	Earhook undamped	
		
Output sound pressure level	2 ccm coupler	Ear simulator
at 1.6 kHz	–	139 dB SPL
Peak	140 dB SPL	144 dB SPL
HFA-OSPL 90	133 dB SPL	–
Gain		
Full on gain (FOG) at 1.6 kHz	–	76 dB
Full on gain (Peak)	80 dB	84 dB
HFA-FOG	72 dB	–
Reference test gain	56 dB	64 dB
Frequency, noise and directivity		
Frequency range	100-5400 Hz	100-5700 Hz
Equivalent input noise	24 dB SPL	26 dB SPL
Total harmonic distortion at 500 / 800 / 1600 Hz	3 / 2 / 1 %	7 / 3 / 2 %
Broadband tinnitus function	–	–
AI-DI	3.6 dB	
Inductive coil sensitivity		
MASL (1 mA/m) at 1.6 kHz	–	107 dB SPL
HFA MASL (1 mA/m)	102 dB SPL	–
HFA SPLITS (left/right)	115 / 112 dB SPL	–
RSETS (left/right)	-1 / -4 dB	–
Battery		
Battery voltage	1.3 V	
Battery current drain	2.4 mA	
Battery life (cell zinc air)	~160 h	
Battery life (rechargeable)	–	
IRIL IEC 118-13:2011 (bystander)		
800-960 MHz	<-34 dB SPL	
1400-2000 MHz	<-34 dB SPL	
ANSI C63.19	M3 / T4	

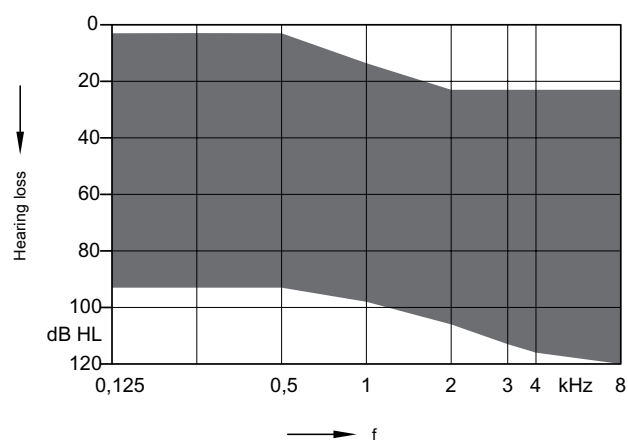
# Fitting Range

XTM S P4



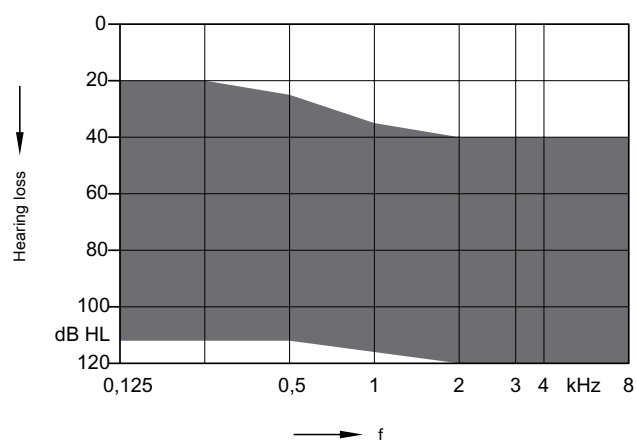
ThinTube open  
ThinTube double  
Earhook damped

XTM P P4



Earhook undamped

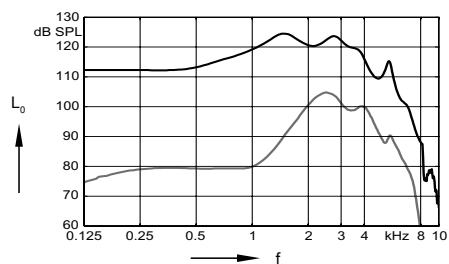
XTM XP P4



Earhook undamped

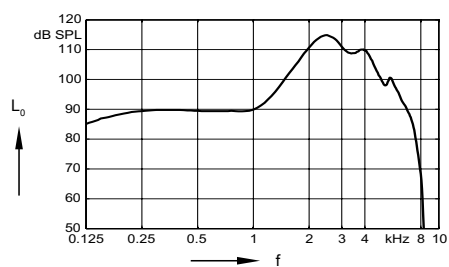
# XTM S P4 (Earhook damped) | Basic Data

## 2 ccm coupler



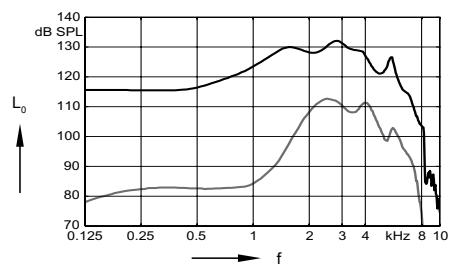
Output sound pressure level  
( $L_i = 90$  dB)

Full on gain  
( $L_i = 50$  dB)



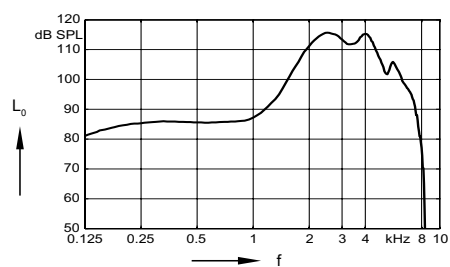
Frequency response  
( $L_i = 60$  dB)

## Ear simulator



Output sound pressure level  
( $L_i = 90$  dB)

Full on gain  
( $L_i = 50$  dB)

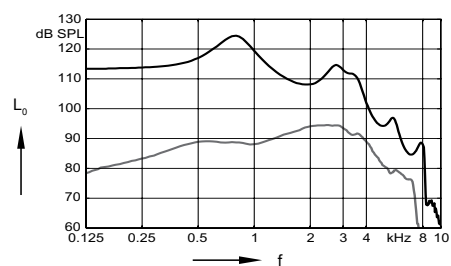


Basic acoustic response  
( $L_i = 60$  dB)



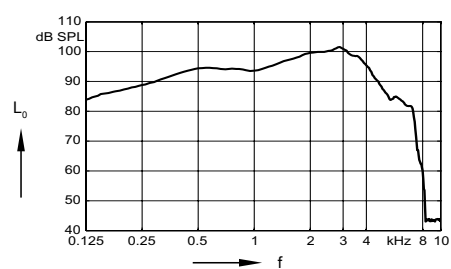
# XTM S P4 (ThinTube) | Basic Data

## 2 ccm coupler



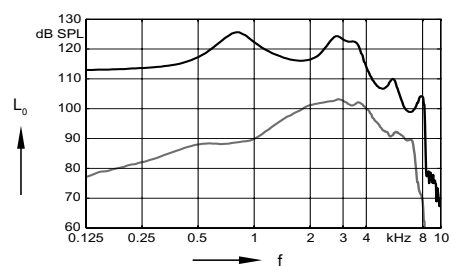
Output sound pressure level  
( $L_i = 90$  dB)

Full on gain  
( $L_i = 50$  dB)



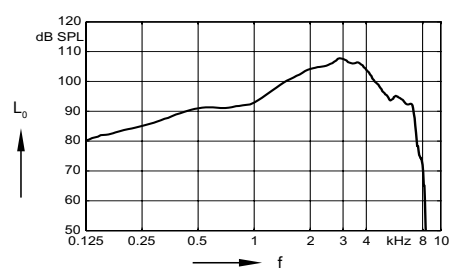
Frequency response  
( $L_i = 60$  dB)

## Ear simulator



Output sound pressure level  
( $L_i = 90$  dB)

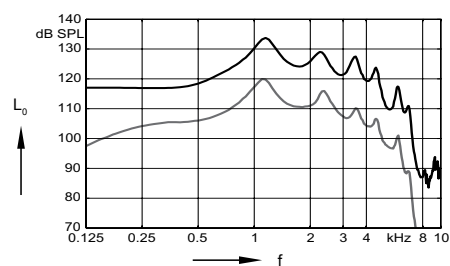
Full on gain  
( $L_i = 50$  dB)



Basic acoustic response  
( $L_i = 60$  dB)

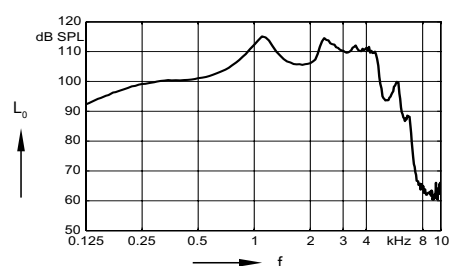
# XTM P P4 (Earhook undamped) | Basic Data

## 2 ccm coupler



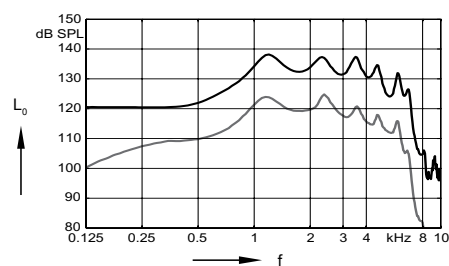
Output sound pressure level  
(L<sub>1</sub> = 90 dB)

Full on gain  
(L<sub>1</sub> = 50 dB)



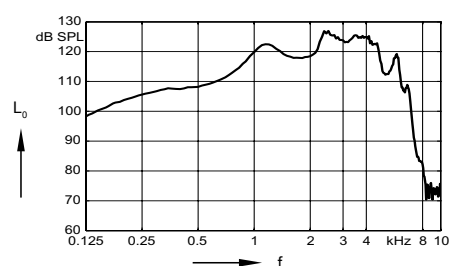
Frequency response  
(L<sub>1</sub> = 60 dB)

## Ear simulator



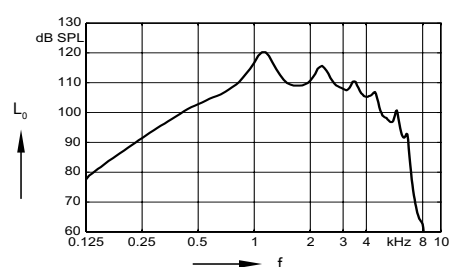
Output sound pressure level  
(L<sub>1</sub> = 90 dB)

Full on gain  
(L<sub>1</sub> = 50 dB)

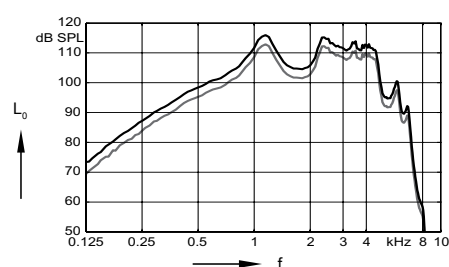


Basic acoustic response  
(L<sub>1</sub> = 60 dB)

## Inductive response



Inductive response  
(H = 10 mA/m)

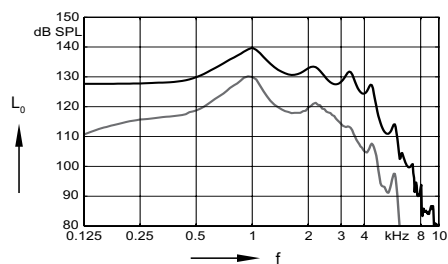


SPLITS curve left  
(H = 31.6 mA/m)

SPLITS curve right  
(H = 31.6 mA/m)

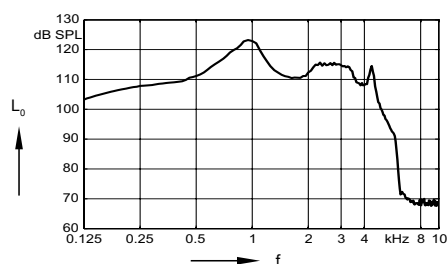
# XTM XP P4 (Earhook undamped) | Basic Data

## 2 ccm coupler



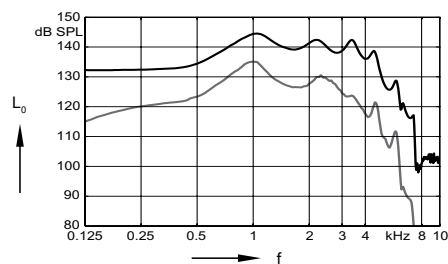
Output sound pressure level  
(L<sub>1</sub> = 90 dB)

Full on gain  
(L<sub>1</sub> = 50 dB)



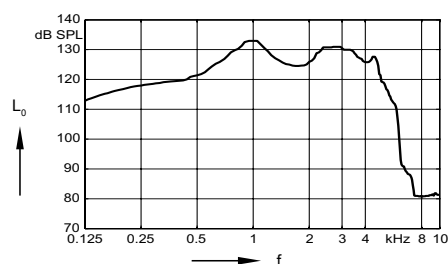
Frequency response  
(L<sub>1</sub> = 60 dB)

## Ear simulator



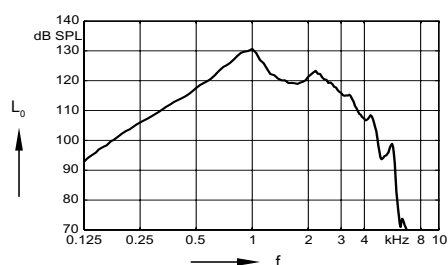
Output sound pressure level  
(L<sub>1</sub> = 90 dB)

Full on gain  
(L<sub>1</sub> = 50 dB)

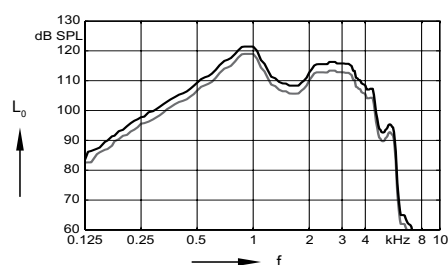


Basic acoustic response  
(L<sub>1</sub> = 60 dB)

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Inductive response  
(H = 10 mA/m)



SPLITS curve left  
(H = 31.6 mA/m)

SPLITS curve right  
(H = 31.6 mA/m)

Notes

[illegible]

# XTM S / P / XP P4

## 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
AI-DI	Articulation Index - Directivity Index
IRIL	Input Related Interference Level
RTF	Reference Test Frequency

### Standards

- ▶ All measurements with the 2 ccm coupler were performed according to ANSI S3.22-2009 and IEC 60118-7:2005 if applicable.
- ▶ All measurements with an ear simulator were performed according to IEC 118-0/A1 and to DIN 45605 (frequency range) if applicable.
- ▶ Tinnitus function 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 following ear pieces were used:
  - Earhook
  - ThinTube

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.



#### 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.