Styletto X

Technical Data

Made for
 iPhone | iPad | iPod

| 7X | 5X | 3X | 2X | 1X | DX |

S-Receiver

- 56 dB / 119 dB SPL (ear simulator)
- 45 dB / 108 dB SPL (2 ccm coupler)

M-Receiver

- 70 dB / 129 dB SPL (ear simulator)
- 60 dB / 119 dB SPL (2 ccm coupler)

P-Receiver

- 80 dB / 134 dB SPL (ear simulator)
- 70 dB / 124 dB SPL (2 ccm coupler)

Data sheet also applicable for Styletto sDemo DX

Styletto X │ 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	–	109 dB SPL	–	123 dB SPL
OSPL 90 (Peak)	108 dB SPL	119 dB SPL	119 dB SPL	129 dB SPL
HFA-OSPL 90	101 dB SPL	–	113 dB SPL	–
Gain				
FOG at 1.6 kHz	–	43 dB	–	55 dB
FOG (Peak)	45 dB	56 dB	60 dB	70 dB
HFA-FOG	37 dB	–	50 dB	–
Reference test gain	24 dB	34 dB	36 dB	48 dB
Frequency, noise and directivity				
Frequency range 7X 5X / 3X / 2X / 1X	100 - 10000 Hz 100 - 8200 Hz	100 - 10000 Hz 100 - 8300 Hz	100 - 9400 Hz 100 - 8200 Hz	100 - 10000 Hz 100 - 8300 Hz
Equivalent input noise	17 dB SPL	21 dB SPL	17 dB SPL	22 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	1 / 1 / 1 / 1 %	1 / 1 / 2 / - %	1 / 2 / 1 / 1 %	2 / 3 / 2 / - %
Tinnitus noiser 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 voltage	1.3 V		1.3 V	
Battery current drain	1.9 mA	1.9 mA	2.1 mA	2.1 mA
Battery runtime (without streaming)	up to 19 h		up to 19 h	
Battery runtime (incl. 2h streaming)	up to 17 h		up to 17 h	
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		M4	
1600-2500 MHz (rating)	M4		M4	

Please find additional information to the values on page ''Further Information''

Styletto X | Technical Data

Type	P-Receiver	
	2 ccm coupler	**Ear simulator**
Output sound pressure level		
OSPL 90 at 1.6 kHz	–	128 dB SPL
OSPL 90 (Peak)	124 dB SPL	134 dB SPL
HFA-OSPL 90	119 dB SPL	–
Gain		
FOG at 1.6 kHz	–	70 dB
FOG (Peak)	70 dB	80 dB
HFA-FOG	63 dB	–
Reference test gain	42 dB	53 dB
Frequency, noise and directivity		
Frequency range 7X 5X / 3X / 2X / 1X	100 - 7500 Hz 100 - 7500 Hz	100 - 8100 Hz 100 - 8100 Hz
Equivalent input noise	16 dB SPL	20 dB SPL
Total harmonic distortion at 500 / 800 / 1600 / 3200 Hz	1 / 2 / 1 / 1 %	3 / 4 / 2 / - %
Tinnitus noiser broadband	75 dB SPL	–
AI-DI	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 voltage	1.3 V	
Battery current drain	2.0 mA	1.9 mA
Battery runtime (without streaming)	up to 19 h	
Battery runtime (incl. 2h streaming)	up to 17 h	
IRIL IEC 60118-13:2016 Ed. 4.0		
700-960 MHz (rating)	user	
1400-2000 MHz (rating)	user	
2000-2700 MHz (rating)	user	
ANSI C63.19-2011		
800-950 MHz (rating)	M4	
1600-2500 MHz (rating)	M4	

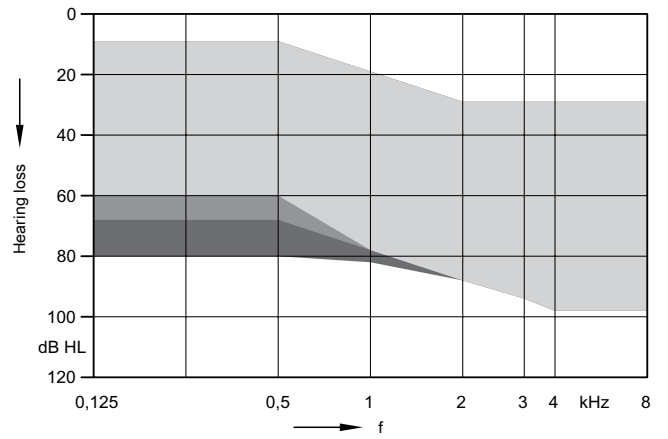Please find additional information to the values on page ''Further Information''
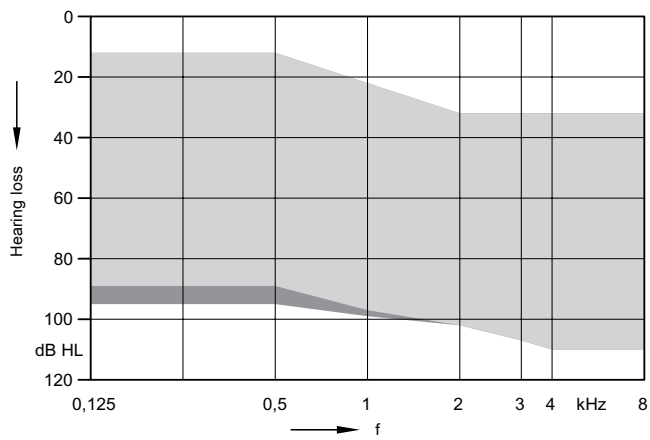
Styletto X | Fitting Range

S-Receiver
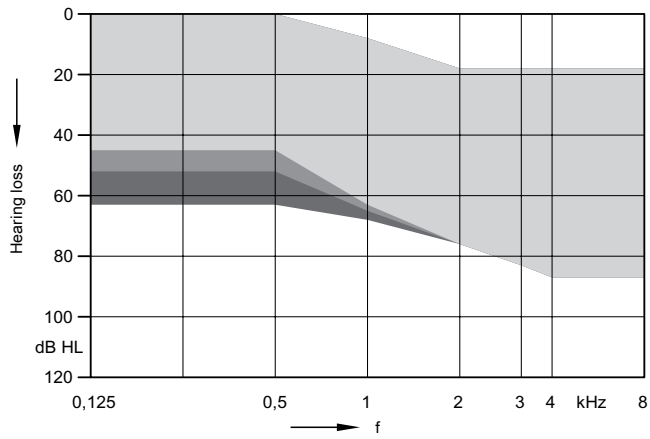
	Open Click Domes
+	Double Click Domes
+ +	Click Mold (no vent)

M-Receiver

	Open Click Domes
+	Double Click Domes
+ +	Click Mold (no vent)

P-Receiver

	Double Click Domes
+	Click Mold (no vent)

S-Receiver (Closed Click Dome) | Basic Data
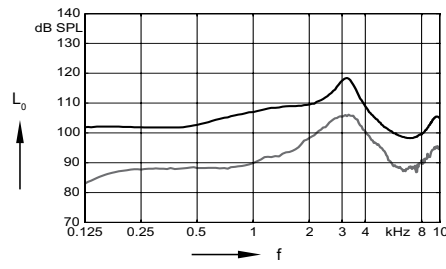
2 ccm coupler

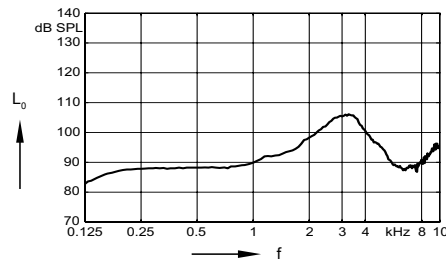**Max. Output sound pressure level (L$_I$ = 90 dB)**
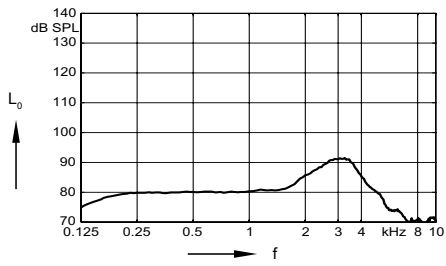
Full on gain (L$_I$ = 50 dB)

Frequency response (L$_I$ = 60 dB)

Ear simulator

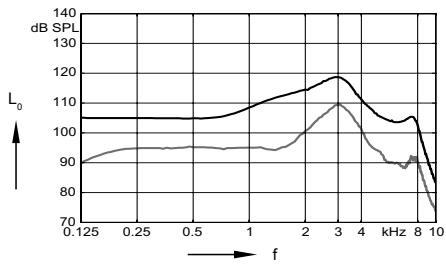**Max. Output sound pressure level (L$_I$ = 90 dB)**

Full on gain (L$_I$ = 50 dB)

Basic acoustic response (L$_I$ = 60 dB)
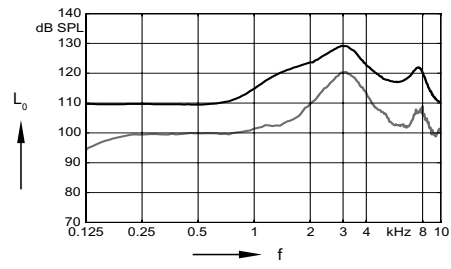
M-Receiver (Closed Click Dome) | Basic Data

2 ccm coupler

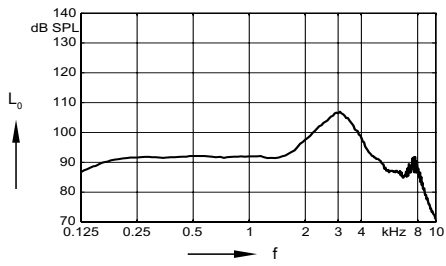**Max. Output sound pressure level**
(L_I = 90 dB)

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 (Click mold) | Basic Data

2 ccm coupler

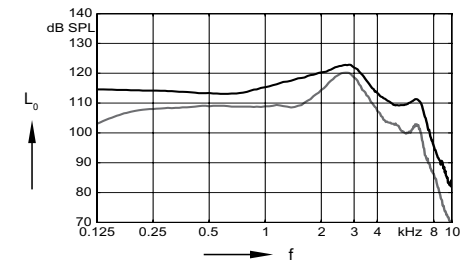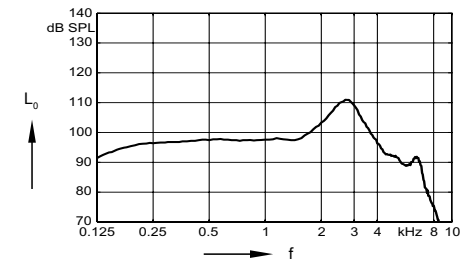**Max. Output sound pressure level (L_I = 90 dB)**
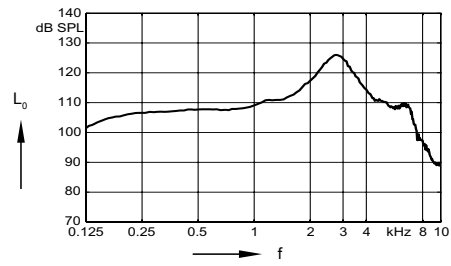
Full on gain (L_I = 50 dB)

Frequency response (L_I = 60 dB)

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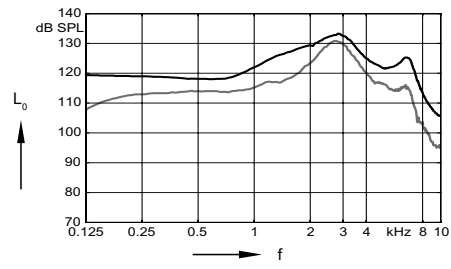
Max. Output sound pressure level (L_I = 90 dB)

Full on gain (L_I = 50 dB)

Basic acoustic response (L_I = 60 dB)

Styletto X │ Features and Accessories

	7X	5X	3X	2X	1X
Dynamic Soundscape Processing	■■■■■	■■■■■	■■■■■	■■■■	■■■■
OVP (Own Voice Processing) [1]	■■■■■	■■■■■	■■■■■	–	–
Sound Clarity	■■■■■	■■■■	■■■	■■■	■■
Signal processing (channels) / Gain&MPO (handles)	48 / 20	32 / 16	24 / 12	16 / 8	16 / 8
Hearing programs	6	6	6	4	4
Extended dynamic range	✓	✓	✓	✓	✓
Extended bandwidth	✓	–	–	–	–
EchoShield	✓	–	–	–	–
HD Music (presets)	3	3	1	1	–
eWindScreen [2]	Binaural	Binaural	Monaural	Monaural	–
Speech and noise management	✓	✓	✓	✓	✓
SoundSmoothing	✓	✓	✓	✓	–
Feedback cancellation	✓	✓	✓	✓	✓
Speech Quality	■■■■■	■■■■	■■■	■■	■■
Directionality (Automatic / Adaptive)	Binaural	Binaural	Binaural	✓	✓
Spatial SpeechFocus [1] [3]	✓	✓	–	–	–
TwinPhone [1]	✓	✓	✓	–	–
Frequency compression	✓	✓	✓	✓	✓
Wearer Interaction	■■■■■	■■■■■	■■■■	■■■■	■■■■
Signia App (iOS and Android)	✓	✓	✓	✓	✓
Spatial Configurator	✓	✓	–	–	–
Adaptive Streaming Volume [4]	✓	✓	✓	✓	✓
Direct Streaming	✓	✓	✓	✓	✓
Made for iPhone	✓	✓	✓	✓	✓
Tinnitus	✓	✓	✓	✓	–
Notched Amplification Therapy	✓	✓	✓	✓	–
Tinnitus noise therapy signal	✓	✓	✓	✓	–
Fitting	✓	✓	✓	✓	✓
Smart Optimizer and Data Logging	✓	✓	✓	✓	✓
Acclimatization manager	✓	✓	✓	✓	✓
InSituGram	✓	✓	✓	✓	✓
AutoFit	✓	✓	✓	✓	✓
TeleCare	✓	✓	✓	✓	✓
Remote Services	✓	✓	✓	✓	✓
Signia App	✓	✓	✓	✓	✓

[1] req. bilateral fitting

[2] Binaural used in dedicated programs for 5X

[3] for 5X, right / left directionality available only in Stroll Program and via the Spatial Configurator

[4] streaming only

■■■■■ highest feature performance   ✓ available   – not available

Styletto X | Features and Accessories

	7X / 5X / 3X / 2X / 1X
Style specific features	
Ingress Protection Rating	IP68
Charging contacts	✓
Battery Size	−
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	−
Color conversion kit with T-Coil	−
Battery door − child lock	−
Small earhook	−
Programming accessories	
ConnexxAir / ConnexxLink	− / −
NoahLink wireless	✓
Programming adapter / cable	−
Accessories	
miniPocket	o
StreamLine TV	o
StreamLine Mic	o
Styletto X Charger	mandatory
CROS Pure 312 X	−
CROS Pure Charge&Go X	−
CROS Silk X	−

✓ available   o optional   − not available

Notes

Further Information

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.
▶ Extended frequency range up to 12 kHz for 7X devices only.
▶ 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 following acoustic connections / ear pieces were used:
    - S-Receiver Unit and M-Receiver Unit: Closed Click Dome
    - P-Receiver Unit: Click Mold
▶ 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 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.
▶ Styletto X is a part of the Kit Styletto X, which also consists of Styletto X Charger. Please consult the datasheet for Styletto X Charger for relevant technical information.
▶ Note: due to the design of the Styletto X Charger, not all Click Molds will fit inside Styletto X Charger.

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 2 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 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.

⬛ Legal Manufacturer
Signia GmbH
Henri-Dunant-Strasse 100
91058 Erlangen, Germany
Phone +49 9131 308 0

www.signia-hearing.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.