

# sound SHD

## S312 Receiver-in-Canal (RIC) Hearing System Series



S312

Functionalities	9	7	5	3
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### Detection

SurroundSupervisor SHD	•	•	•	•
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### Localization and Focus

SphereSound SHD Dynamic	•			
SpeechBeam SHD-3	•			
SphereSound SHD Personalized	•	•		
SpeechBeam SHD-2		•		
SphereSound SHD Static	•	•	•	
SpeechBeam SHD-1			•	

### Automatic Program

Music	•	•		
Noise	•	•	•	
Conversations in a small group	•	•	•	
Conversations in a crowd	•	•	•	
Conversations in noise	•	•	•	•
Conversations in quiet	•	•	•	•
Quiet	•	•	•	•
AutoSurround SHD	7	7	6	3

### Optimization and Comfort

SurroundOptimizer SHD	•	•	•	•
AcclimatizationManager	•	•	•	•
ConversationLift+	•	•	•	Speech Lift
NoiseReduction	•	•	•	•
FeedbackManager	•	•	•	•
Sound Impulse Manager SHD	•	•	•	•
Active Wind Block	•	•	•	•
SoundRestore	•	•	•	•
DataLogging	•	•	•	•
Tinnitus Manager	•	•	•	•
PhoneConnect	•	•	•	•
BiLink	•	•	•	•
BiPhone	•	•	•	•
Bluetooth (accessory needed)	•	•	•	•

### Channels and Programs

Channels (G/AGC)	20	16	12	8
No. of programs (AutoSurround SHD/Manual/Wireless)	7/3/3	7/3/3	6/3/3	3/3/3

### In all technology levels

Telecoil, RCV2, uStream, uDirect3, uTV3, uMic2

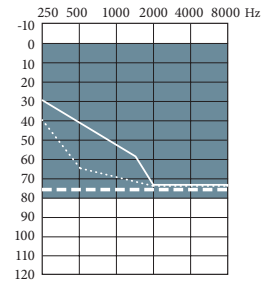
Receiver type	Standard (xS)	Power (xP)	Super Power (xSP)
Output / gain	111 / 47	124 / 57	125/62
Open dome	•	•	
Closed dome	•	•	
Power dome	•	•	
Sleeve mold	•	•	
cShell (hard and soft options)	•	•	•

sound SHD S312 is rated IP 68

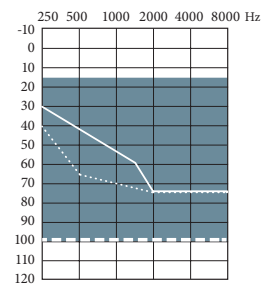


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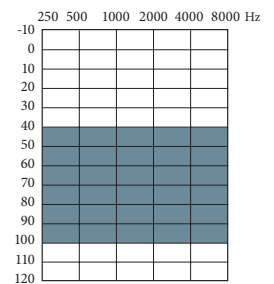
### Fitting guides



Standard Receiver (xS)



Power Receiver (xP)



Super Power Receiver (xSP)

- Open dome
- - - Closed dome
- - - Power dome or sleeve mold

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## S312 Receiver-in-Canal (RIC) Hearing System Series

Standard Receiver (xS)      Power Receiver (xP)      Super Power Receiver (xSP)

### ANSI 3.22 2014/IEC 60118-7 2005 2cc coupler technical data

	Reference test frequency - IEC 60118-7 (kHz)	1.6	1.6	1.6
	OSPL90			
	Maximum (dB SPL)	111	124	125
	HFA - OSPL90 (dB SPL) at RTF (dB SPL)	106	119	120
	Full on gain (input 50 dB SPL)			
	Maximum (dB)	47	57	62
	HFA - FOG (dB) at RTF (dB)	40	50	62
	Reference test setting (RTS)			
	Frequency range (Hz)	<100-8500	<100-7300	<100-5500
	Reference test gain (dB)	29	42	43
	Current drain at RTS (mA)	1.15	1.25	1.2
	Typical battery life (h)	160	140	150
	Equivalent input noise at RTS (dB SPL)	19	18	19
	Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	1.0/1.0/1.0	1.5/1.0/0.5	0.5/0.5/0.5
	Induction coil sensitivity (31.6 mA/m)			
	HFA SPLITS/STS-RSETS (dB SPL/dB)	89/0	102/0	103/0
	<p>Standard: mic at 70 dB SPL vs induction coil at 100 mA/m</p> <p>--- Mic - - - Induction Coil</p>			

#### Electromagnetic compatibility

EMC immunity by ANSI c63.19-2011 EMC, omni/telecoil      M4/T4      M4/T4      M4/T4

### IEC 60118-0 OES coupler technical data

	Reference test frequency - IEC 60118-0 (kHz)	1.6	1.6	1.6
	OSPL90			
	Maximum (dB SPL) at RTF (dB SPL)	122	133	135
		114	130	134
	Full on gain (input 50 dB SPL)			
	Maximum (dB) at RTF (dB)	58	67	71
		48	62	70
	Basic frequency response			
	Frequency range (DIN 45605) (Hz)	< 100-9500	< 100-6700	< 100-5100
	Reference test gain (dB)	39	55	59
	Current drain at RTG (mA)	1.15	1.2	1.2
	Typical battery life (h)	160	150	150
	Equivalent input noise at RTG (dB SPL)	19	19	19
	Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)	1.0/1.5/1.5	1.5/1.5/1.0	1.0/1.0/0.5
	Induction coil sensitivity			
	at RTF (graph shown for 31.6 mA/m at RTG) (dB SPL)	99	115	119
Electromagnetic compatibility				
EMC immunity by IEC 60118-13, 2011 field strength 90/50/35 V/m, omni. IRIL low/medium/high band (dB SPL)		24/27/27	23/26/24	21/21/28

#### Legend

- xS receiver
- xP receiver
- xSP receiver

#### Test conditions

Battery size: 312; Source: voltage 1.3 V  
 The measurements obtained with a closed configuration using an HA-1 coupler (ANSI-3.7-1995) or occluded ear simulator (EN 60711, coupling arrangement according to fig. 4 in the test standard). The hearing system set to HANSATON scout test settings. LLE (Low Level Expansion) is applied at an approximate level of 35 dB SPL. Domes should never be fit on patients with perforated eardrums, exposed middle ear cavities, or surgically altered ear canals. In the case of such a condition, we recommend use of a customized earmold. Sound pressure level of these hearing aids exceeds 132 dB SPL.  
 We reserve the right to change specification data without notice as improvements are introduced.

