

# INTERTON | SCOPE<sup>4</sup>

Let your customers enjoy  
a more comfortable sound



S440 / S440 HPG / S440-D / S440-D HPG  
S450 / S450 HPG / S450-D / S450-D HPG

## ITE - TECHNICAL DATASHEET

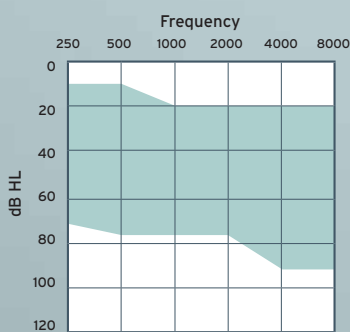
With Interton Scope 4 we introduce a completely new approach to sound with exceptional feedback protection and a new sound technology called SoundScape. Scope 4 is a full family of advanced best-in-class hearing instruments for the active customer who want great sound quality in everyday listening situations.

### Standard Features

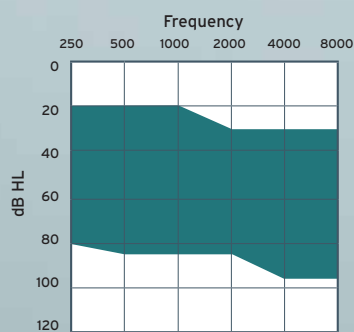
- Logarithmic 9 Channel WDRC
- 6 Gain Handles in Fitting Software
- SoundScape Technology
- Selectable beamwidth
- Background Noise Reduction
- Microphone Noise Reduction
- Adaptive Feedback Cancellation
- Feedback Guard
- Data Logging - Quick View
- Power-on Delay
- Audible Signal Tones
- Earwax Management System
- Standard and Power Configurations
- On/Off switch via the battery door
- Left/right side indicators
- 312/13 battery
- VC, Push Button, Telecoil optional

### Fitting ranges

**S440 / S440-D**  
**S450 / S450-D**



**S440 HPG / S440-D HPG**  
**S450 HPG / S450-D HPG**

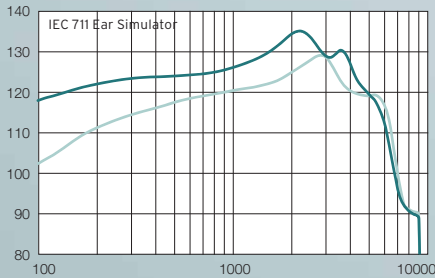


Technical specifications ITE		S440 / S440-D S450 / S450-D			S440 HPG / S440-D HPG S450 HPG / S450-D HPG			
		IEC 118-0 Ear Simulator	IEC 118-7 2cc Coupler	ANSI S3.22	IEC 118-0 Ear Simulator	IEC 118-7 2cc Coupler	ANSI S3.22	
Reference test gain (60 dB SPL input)	1600Hz*/HFA**	40	37	37	49	46	46	dB
Full-on gain (50 dB SPL input)	Max.	62	52	52	68	58	58	dB
	1600Hz*/HFA**	52	45	45	61	53	53	
Maximum output (90 dB SPL input)	Max.	129	119	119	135	125	125	dB SPL
	1600Hz*/HFA**	123	115	115	131	122	122	
Total harmonic distortion	800 Hz	2,2	1,1	1,1	0,7	0,4	0,4	%
	1600 Hz	1,3	1,0	1,0	0,2	0,5	0,5	
Telecoil sensitivity (1 mA/m input)	Max.	93	-	-	99	-	-	dB SPL
Full-on Telecoil sensitivity @ 1mA/m	1600 Hz	82	-	-	91	-	-	dB SPL
	HFA	-	74	74	-	83	83	
HFA - SPLITS @ 31.6 mA/m (ANSI)	HFA	-	97	97	-	106	106	dB SPL
Equivalent input noise, w/o Noise reduction		29	25	25	24	24	24	dB SPL
1/3 Octave Equivalent Input Noise, w/o Noise reduction	1600 Hz	12	-	-	12	-	-	dB SPL
Frequency range (DIN 45605)		210- 6910	110- 6850	110- 6840	100- 5040	100- 5050	100- 5050	Hz
Current Drain		0,99	1,04	1,04	1,0	1,1	1,1	mA
Typical Battery life time (Battery type 312/13)		162/293	154/279	154/279	160/290	145/264	145/264	hrs

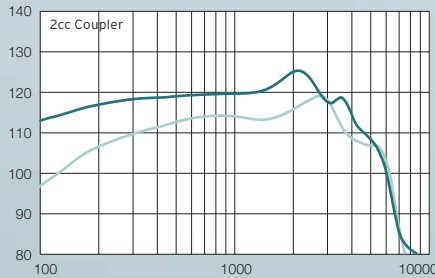
\* IEC 118-0, Ear Simulator

\*\* IEC 118-7 and ANSI S3.22, 2cc coupler

Maximum Output (OSPL 90)



Maximum Output (OSPL 90)



Notes:

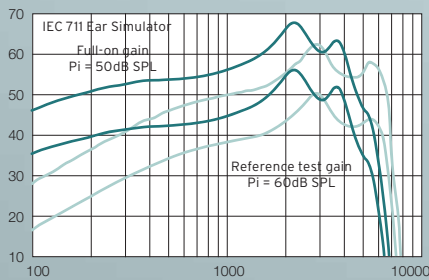
O.E.S. = Occluded Ear Simulator  
2cc = 2 cm<sup>3</sup> coupler  
Pi = Acoustic input signal

Basic settings:

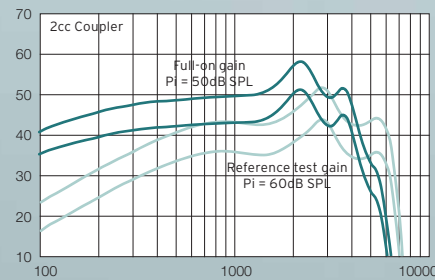
Full-on Gain, Reference Test Gain  
MPO = Maximum Power Output  
Maximum Band Width

Measured according IEC 118-0 1983, amendment 1994; at 1.3 V and 23°C on O.E.S. according to IEC711 1981, resp on 2cc according to IEC60118-7 2nd edition 2005 (DIN average calculated at 500 Hz, 1000 Hz and 2000 Hz; HFA average calculated at 1000 Hz, 1600 Hz and 2500 Hz; 0 dB SPL sound pressure equals 20 Pa). All measurements without DSP features activated unless indicated otherwise.

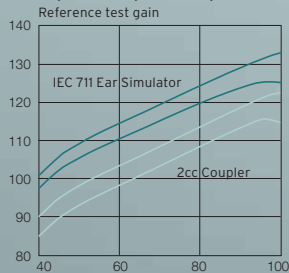
Full-On and Reference Test Gain



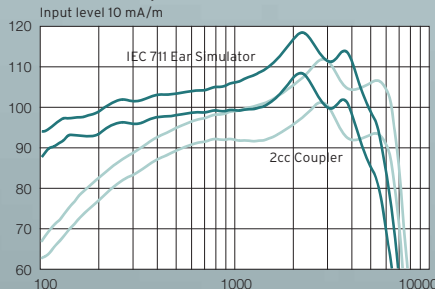
Full-On and Reference Test Gain



Input/Output Response



Telecoil response



Standard HPG



INTERTON  
ESSENTIAL HEARING