

Quantum™ Pro

ITE series

Signature features

20 channels

SpeechZone using binaural spatial processing

SpeechZone™ is the new feature in Pro hearing instruments that automatically lets clients clearly enjoy conversations even in the toughest listening situations. SpeechZone, enabled by binaural spatial processing, is activated when the hearing instruments determine speech is coming from the front in a noisy environment - then both hearing instruments really zone in on speech

Automatic program with SmartFocus

Clients can experience superior automatic performance with the optimal blend of 3 listening environments plus a unique specialized treatment of music. In addition, the integration of SmartFocus™ further improves speech understanding in noise or provides optimal comfort automatically

Pinna Effect

This feature uses sophisticated calculations to recreate natural directionality

Natural Sound Balance

An adaptive feature to minimize artifacts that can occur when amplified sound combines in the ear canal with direct sound. Natural Sound Balance continuously monitors these sounds and makes precision adjustments to preserve a clear, balanced signal

Automatic Adaptation Manager

Allows for an automatic and smooth adjustment period for the client; providing the best possible first fit acceptance combined with maximum long-term benefit for speech understanding

Feedback manager

Feedback manager offers maximum usable gain by suppressing feedback transients before they become audible

Wireless technology

Binaural Phone – streams audio to the non-phone ear, allowing for binaural hearing while using a phone

DuoLink – program, volume and SmartFocus adjustments conducted on one hearing instrument are automatically transferred to the other ear

uDirect™ 2 (optional) – wireless interface between hearing instruments and Bluetooth® enabled devices (eg. cell phones)

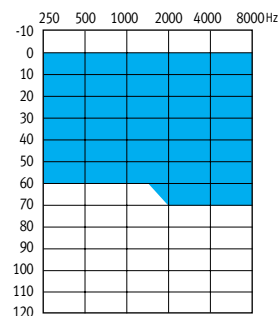
uTV™ 2 (optional) – streams audio from a TV or audio source to the uDirect 2

Additional features

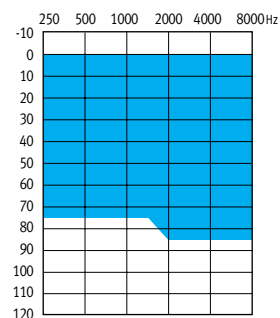
- Multiband adaptive directional microphone
- 3 manual + 3 wireless streaming programs
- AntiShock™
- Self learning and LearnNow™
- MyMusic™
- Wind noise manager
- IntelliVent technology
- Speech enhancement LD
- Noise reduction
- Data logging
- Easy-t and telecoil
- DAI through uDirect/uDirect 2
- Optional remote controls
- Optional Smart Alert System
- Optional wireless programming with iCube



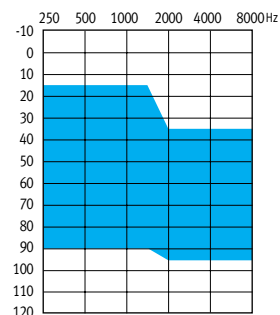
Fitting guides



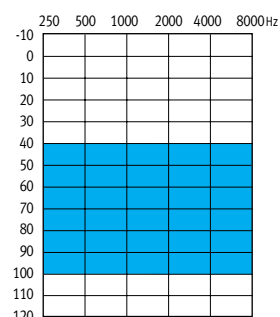
Quantum Pro M
(moderate power)



Quantum Pro P
(power)



Quantum Pro HP
(high power)



Quantum Pro SP
(super power)

Quantum Pro is suitable for fitting mild to severe hearing losses and can fit audiogram configurations ranging from reverse to precipitously sloping.

Battery and style guide: S=Standard; O=Optional

Battery	FS	HS	CA
13	S	O	O
312	O	S	S

Quantum Pro ITE series

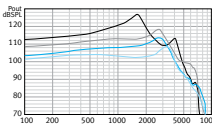
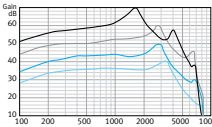
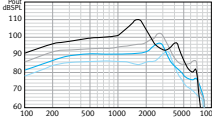
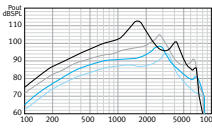

Quantum Pro M
(moderate power)

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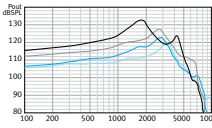
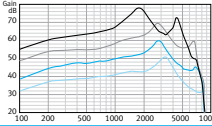
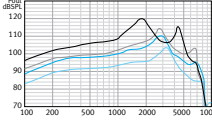
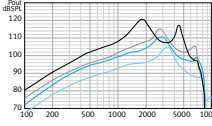
ANSI 3.22 2003/IEC 118-7 2CC COUPLER TECHNICAL DATA

Reference test frequency - IEC 118-7 (kHz)		1.6	1.6	1.6	1.6
		OSPL90			
Maximum (dB SPL)		112	117	122	130
Nominal (dB SPL)		109	114	119	127
ANSI HFA (dB SPL)		103	109	114	120
at RTF (dB SPL)		103	109	113	127
		Full on gain (input 50 dB SPL)			
Maximum (dB)		40	50	60	70
ANSI HFA (dB)		37	45	54	62
at RTF (dB)		35	43	53	70
		Basic frequency response (ANSI 2003)			
Frequency range (Hz)		100-7500	100-7500	100-7100	100-5500
Reference test gain (dB)		26	32	37	43
Current drain at RTG (mA) 312/13		1.2/1.2	1.2/1.2	1.2/1.2	1.2/1.2
Typical battery life (h) 312/13		150/260	150/260	150/260	180/260
Equivalent input noise at RTG (dB SPL)		19	19	19	19
Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)		1.5/1.5/1.0	1.5/1.5/1.0	1/1/1	1/1/1
		Induction coil sensitivity (ANSI 2003, 31.6 mA/m)			
HFA SPLITS/STS (dB SPL/dB)		88/2	94/2	99/2	104/1
		Quantum P: mic at 70 dB SPL vs. induction coil at 100 mA/m			
		<div> <div>— Mic</div> <div>— Induction coil</div> </div>			

Electromagnetic compatibility

EMC immunity by ANSI C63.19-2001 EMC, omni/telecoil	M4/T4	M4/T4	M4/T4	M4/T4
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IEC 118-0 OES COUPLER TECHNICAL DATA

Reference test frequency - IEC 118-0 (kHz)		1.6	1.6	1.6	1.6
		OSPL90			
Maximum (dB SPL)		120	123	128	133
at RTF (dB SPL)		111	118	121	132
		Full on gain (input 50 dB SPL)			
Maximum (dB)		50	60	70	79
at RTF (dB)		44	52	62	76
		Basic frequency response			
Frequency range (DIN 45605) (Hz)		100-8200	100-8200	100-7500	100-5500
Reference test gain (dB)		36	43	46	57
Current drain at RTG (mA) 312/13		1.2/1.2	1.2/1.2	1.2/1.2	1.2/1.2
Typical battery life (h) 312/13		150/260	150/260	150/260	180/260
Equivalent input noise at RTG (dB SPL)		19	19	19	19
Total harmonic distortion at 500 Hz/800 Hz/1600 Hz (%)		2.0/2.0/1.5	2.0/2.0/1.5	1.0/1.5/1.0	1.5/1.5/1
		Induction coil sensitivity			
at RTF (graph shown for 31.6 mA/m at RTG) (dB SPL)		96	102	106	119
Maximum (1 mA/m at full on gain) (dB SPL)		83	92	102	110
at RTF (1 mA/m at full on gain) (dB SPL)		76	85	94	108
Electromagnetic compatibility					
EMC immunity by IEC 60118-13, field strength 75/50 V/m, omni IRIL low/high band (dB SPL)		31/41	29/40	34/45	23/32

LEGEND

- Quantum Pro SP
- Quantum Pro HP
- Quantum Pro P
- Quantum Pro M

TEST CONDITIONS

Battery size: 312/13; Source voltage: 1.3 V; Impedance: 7.5 Ohms; Vent: closed at canal end
 Tubing 7mm (2cc/OES coupler) – Quantum Pro M, Quantum Pro P, Quantum Pro HP.
 Tubing 9 mm (2cc coupler), Tubing 5mm (OES coupler) - Quantum Pro SP.
 Measurement data obtained with hearing aid set to linear, omni mode with all adaptive features disabled.
 We reserve the right to change specification data without notice as improvements are introduced.