

element™



personalization meets
innovation



unitron[®]
hearing 



Three products. Three price points. Premium innovations all around.

Why should a truly personalized fit be available only in a premium hearing instrument? And why is it that innovations are usually reserved for these higher-priced products? Our response to these questions is Element™: a series of brilliant-sounding hearing instruments that feature premium innovations in the advanced through essential categories.

advanced



essential

e¹⁶

e⁸

e⁴

Why Element?

- ▶ **Element is for everyone:** a choice of three feature-rich models with varying degrees of automatic performance that span the advanced to essential categories. A wide range of styles including Moxi™, the ultra-small BTE supporting Canal Receiver Technology (CRT), and Moda™ 10A BTE available in an open fit.
- ▶ **Element is for the individual:** meet the specific needs of each client by choosing the model with the right features for their lifestyle, listening preferences and budget.
- ▶ **Element sounds great:** deliver brilliant sound quality in everyday listening environments with the latest generation DSP platform.

element at-a-glance

	e ¹⁶	e ⁸	e ⁴
Performance Profile			
Range of loss	Mild to severe	Mild to severe	Mild to severe
Channels	16	8	4
Bands	16	8	8
Processing types	WDRC Linear Limiting	WDRC Linear Limiting	WDRC Linear Limiting
Features			
Automatic programs	AutoPro2™	AutoMic™	
Manual listening programs	Up to 3	Up to 3	Up to 3
Ability to disable manual listening programs	•	•	•
Directional microphone system	Adaptive directional, directional, omni	Adaptive directional, directional, omni	Directional, omni
AntiShock™	•	•	•
Speech enhancement	Speech enhancement LD	•	
Noise reduction	•	•	•
Wind noise manager	•	•	•
Feedback management	Phase canceller	Phase canceller	Phase canceller
Automatic telephone solution	Easy-t (custom and BTE)	Easy-t (custom and BTE)	Easy-t (custom and BTE)
Data logging	•	•	•
Canal Receiver Technology (CRT)	Moxi	Moxi	Moxi
Slim Tube/Open fitting	Moda and 13 no VC	Moda and 13 no VC	Moda and 13 no VC
Quiet mode expansion	•	•	•
OnBoard™ Control (volume control or program control)	Moxi	Moxi	Moxi
Manual volume control (may be disabled)	•	•	•
Ideal volume indicator	•	•	•
Program beep indicator	•	•	•
Low battery warning	•	•	•
Optional telecoil	•	•	•
MLx (FM) compatible	• BTE (except Moda and Moxi)	• BTE (except Moda and Moxi)	• BTE (except Moda and Moxi)



AntiShock™

The breakthrough innovation that eliminates the discomfort of sudden, unsettling noises

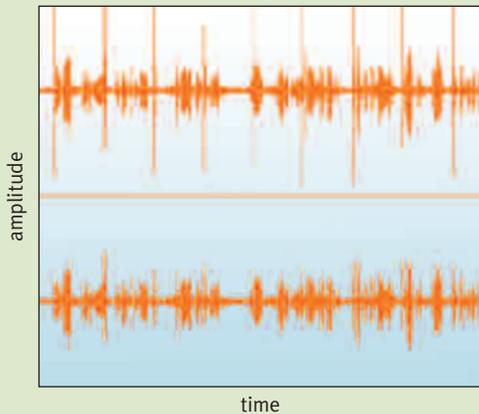
e¹⁶ e⁸ e⁴ The slamming of a door; clattering of cutlery on plates; the sound of high heels on a floor. While such everyday sounds are mere annoyances to most, they can be very uncomfortable for those wearing hearing instruments. Element's new, innovative antiShock™ instantly identifies and minimizes impulse sound characteristics without eliminating or making the sounds unrecognizable. Independent of gain and MPO settings, antiShock's intelligent detector is able to distinguish undesirable sounds from desirable sounds so that speech is not impaired.

A standard feature in all three Element models, antiShock provides wearer comfort by managing sounds that are not loud enough or of long enough duration to activate traditional compression technology, MPO or noise reduction systems.

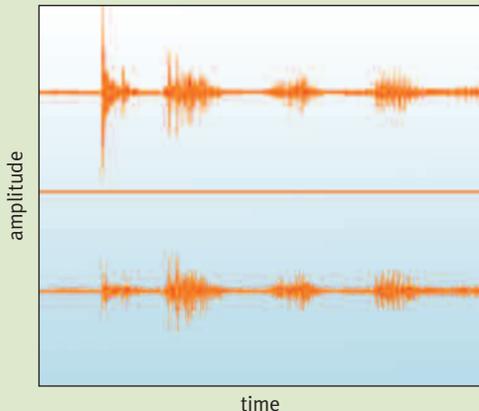


To learn more about this technology see our antiShock backgrounder or download your copy at <http://www.unitronhearing.com/professionals/products/element.htm>

Speech+Shock when AS-Off (top) and AS-On (bottom)



Speech+Shock when AS-Off (top) and AS-On (bottom)



AntiShock™ analyzes the rate at which input levels change within a particular time frame. If the rate differs from that typical of desirable sounds, such as speech, and is consistent with the characteristics of unwanted impulse sounds, gain reduction is instantly applied to reduce the loudness of the signal without affecting speech.



Some innovations make great headlines but don't address everyday challenges. Element includes innovations that make a real difference – and makes them accessible to even more clients.

Speech enhancement

Improves speech clarity and ease of listening

e¹⁶ e⁸

Speech enhancement

Speech enhancement identifies the presence of speech in the listening situation and increases gain in any of the bands where speech is the dominant signal component. This ensures the optimal amount of gain to provide improved clarity and ease of listening, and reduces the need for volume adjustments.

e¹⁶

Speech enhancement LD

Speech enhancement LD in Element 16 provides your clients with all the advantages of speech enhancement, *plus* the added benefits of level dependent technology.

Speech enhancement LD provides greater enhancement to softer inputs to improve audibility and ease of listening, while providing less enhancement as input levels rise to prevent loudness tolerance issues.

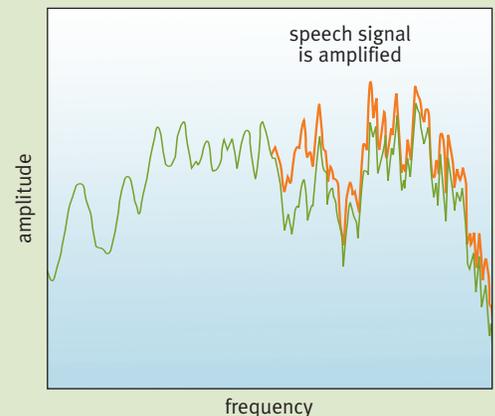
Speech enhancement LD permits the application of greater gain while maintaining signal stability and comfort, making it ideal for clients who interact in a wide variety of listening environments.



To learn more about this technology see our speech enhancement LD backgrounder or download your copy at <http://www.unitronhearing.com/professionals/products/element.htm>

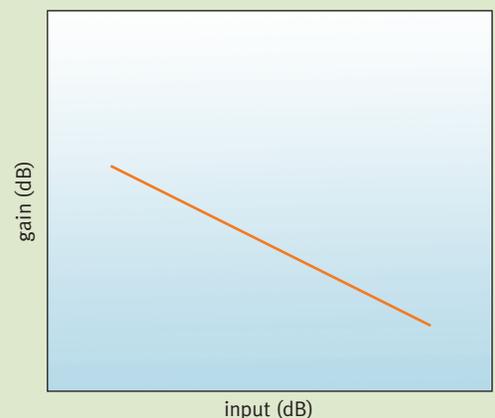


The effect of speech enhancement



Speech enhancement is designed to apply additional gain in those bands where speech is the dominant signal component.

The effect of speech input level



Speech enhancement LD applies larger gain increases to softer speech inputs than to louder speech inputs.

automatic options



Choose automatic or manual performance

Element 16 features autoPro2[™] plus three manual listening programs. Settings from any autoPro2 program can be easily duplicated for a manual program. Element 8 features autoMic[™] and three manual listening programs. Element 4 features three manual listening programs.

AutoPro2[™]

Intuitively monitors and selects listening destinations

e¹⁶ Element 16 features autoPro2[™] – two distinct listening destinations within one seamless automatic program. AutoPro2 automatically switches between quiet and noise destinations by intelligently monitoring the acoustic characteristics of the listening environment, including modulation depth, modulation frequency, signal duration, initiation and spectral variance.

Within each destination you can tailor the gain and output in the device, shape the frequency response, and adjust the advanced features. Within autoPro2, the processing strategy can be customized to either WDRC or linear limiting to best meet individual needs.

You can further personalize Element 16 by specifying within U:fit[™] fitting software how often and how quickly switches occur between listening destinations, and how noticeable the changes are.

AutoMic[™]

Intelligently switches between omni and directional microphones

e⁸ Element 8 features autoMic, a feature that intelligently switches between omni and directional microphone strategies within a single listening program, depending on the signal characteristics of the environment. For the directional strategy, choose between either a fixed or adaptive directional microphone mode, depending on your client's typical listening situations and preferences.

Manual

Three listening programs for different environments

e⁴ Element 4 features 3 manual listening programs.

inside every element

Comfort features improve everyday listening

Rich feature set across the Element series

Multiple directional strategies

Every Element model features multiple microphone strategies to enhance speech perception in different listening environments:

- ▶ Element 16: adaptive, fixed directional and omni
- ▶ Element 8: adaptive, fixed directional and omni
- ▶ Element 4: fixed directional and omni

Phase canceller

Element monitors input signals for characteristics consistent with feedback. The phase canceller then eliminates feedback by calculating and applying a counter-signal: a process that does not affect gain for desirable signals.

Easy-t

Element senses the proximity of a telephone* and automatically switches to the telephone program for either telecoil or an acoustically fitted phone program. When the phone is moved away from the ear, Element returns to the listening program previously in use.

Wind noise manager

Element analyzes the incoming signal and intelligently reduces gain only in those bands where wind noise is predominant. The amount of wind noise reduction progressively increases as wind energy increases to balance speech preservation and comfort. The amount/degree of wind noise reduction is adjustable in U:fit fitting software.

Noise reduction

Element intuitively decreases gain in any band where noise is the dominant signal, while maintaining gain in bands containing primarily speech. The amount/degree of noise reduction is adjustable in U:fit fitting software.

* some telephones or cellular/mobile phones may require a magnet for automatic functionality



Convenient features for you and your clients

Data logging – captures actual usage information for improved counseling, accurate fine-tuning and reduced follow-up needs. Element permits fitters to easily apply adjustments directly from the data logging screen in U:fit.

Ideal volume control – a soft beep tells clients when they've reached the setting you've recommended.

Program beep indicator – gentle beeps advise clients of a program change.

Choice of processing strategies – choice of linear limiting and WDRC increases ability to personalize fit.

Element 16, 8, 4

Styles	Battery Size	dB SPL 2cc		dB SPL Ear Simulator	
		Peak Gain	Peak Output	Peak Gain	Peak Output
CIC	10A	40 dB	112 dB	51 dB	122 dB
Mini canal	10A	40 dB	112 dB	51 dB	122 dB
Canal/Half shell	312	48 dB	113 dB	58 dB	123 dB
Full shell	13	50 dB	115 dB	60 dB	125 dB
Full shell power	13	60 dB	122 dB	70 dB	131 dB
BTE	13	60 dB	125 dB	68 dB	130 dB
BTE power	13	70 dB	131 dB	74 dB	137 dB
BTE M (no vc)	13	55 dB	125 dB	61 dB	131 dB
Moda with earhook	10A	47 dB	125 dB	54 dB	130 dB
BTE M (no vc) with slim tube	13	51 dB	122 dB	56 dB	126 dB
Moda with slim tube	10A	43 dB	117 dB	48 dB	123 dB
Moxi xS receiver	312	44 dB	109 dB	55 dB	121 dB
Moxi xP receiver	312	55 dB	123 dB	62 dB	132 dB



Element is available in a full range of colours and styles including Moxi (CRT) and Moda 10A (slim tube open fit).

element™

this is your element

Unitron Hearing creates world-class hearing solutions that make everyday listening easier for people with hearing loss. The Company supports hearing healthcare professionals and their clients by delivering a diverse, high-value, easy-to-use product line to satisfy every hearing loss, lifestyle and budget. Unitron Hearing has made it a cornerstone of its business to incorporate premium innovations into every product category. Unitron Hearing has 12 international offices including its global Development Centre located in Kitchener, Canada, and serves people with hearing loss through distribution partners in over 65 countries.