indigo™

I am Indigo.

unitron hearing®

I am true to life.

I am brilliant.

I am sophisticated
but I am not complicated.

I am in control
but I am still free.

I am always right

but you define right.

I am real

but I am still a wonder.

I am Indigo.
I deliver.

I deliver
automatic performance with adaptive precision.

Fitting ease and control in multiple environments

Automatic hearing instruments offer remarkable ease and convenience. And yet, fitting them has become an exercise in compromise: features in single-program automatic instruments adapt from pre-determined defaults that give fitters little control and therefore less confidence in listening outcomes in multiple listening environments.

Today, Indigo delivers control in a sophisticated, easy-to-fit, remarkable-sounding hearing instrument. Indigo brings to the automatic world the same predictably superior results in multiple listening situations that, until now, only a manual multi-program instrument has been able to deliver.

Indigo delivers brilliant, true-to-life sound across diverse listening environments, with the perfect simplicity of automatic performance.

AutoPro4™
delivers exceptional listening outcomes.

Flexibility to adjust adaptive features for different environments

At the heart of Indigo's superior listening performance is autoPro4, four independently and easily fitted listening programs brought together into one seamless, automatic function.

AutoPro4 gives fitters complete flexibility to specify the performance of adaptive features in each of its four sound destinations. Fittings are simple. Results are sophisticated: predictably superior fitting outcomes, predictably superior listening experiences in every situation, plus automatic convenience.

Demystifying the perfect fit

Indigo uncomplicates the automatic hearing instrument. Simply quick-fit based on industry established fitting formulas and wearer validated default settings for your client's hearing loss and actual listening environments. If you choose to make further individual refinements, that choice is readily – and easily – available to you.

THE REAL WORLD OF SOUND
The real world of sound can be categorized into four key situations – quiet, group/party noise, traffic/intense noise and music. Each of these "sound destinations" is characterized by specific qualities and challenges, and each is ever-changing.
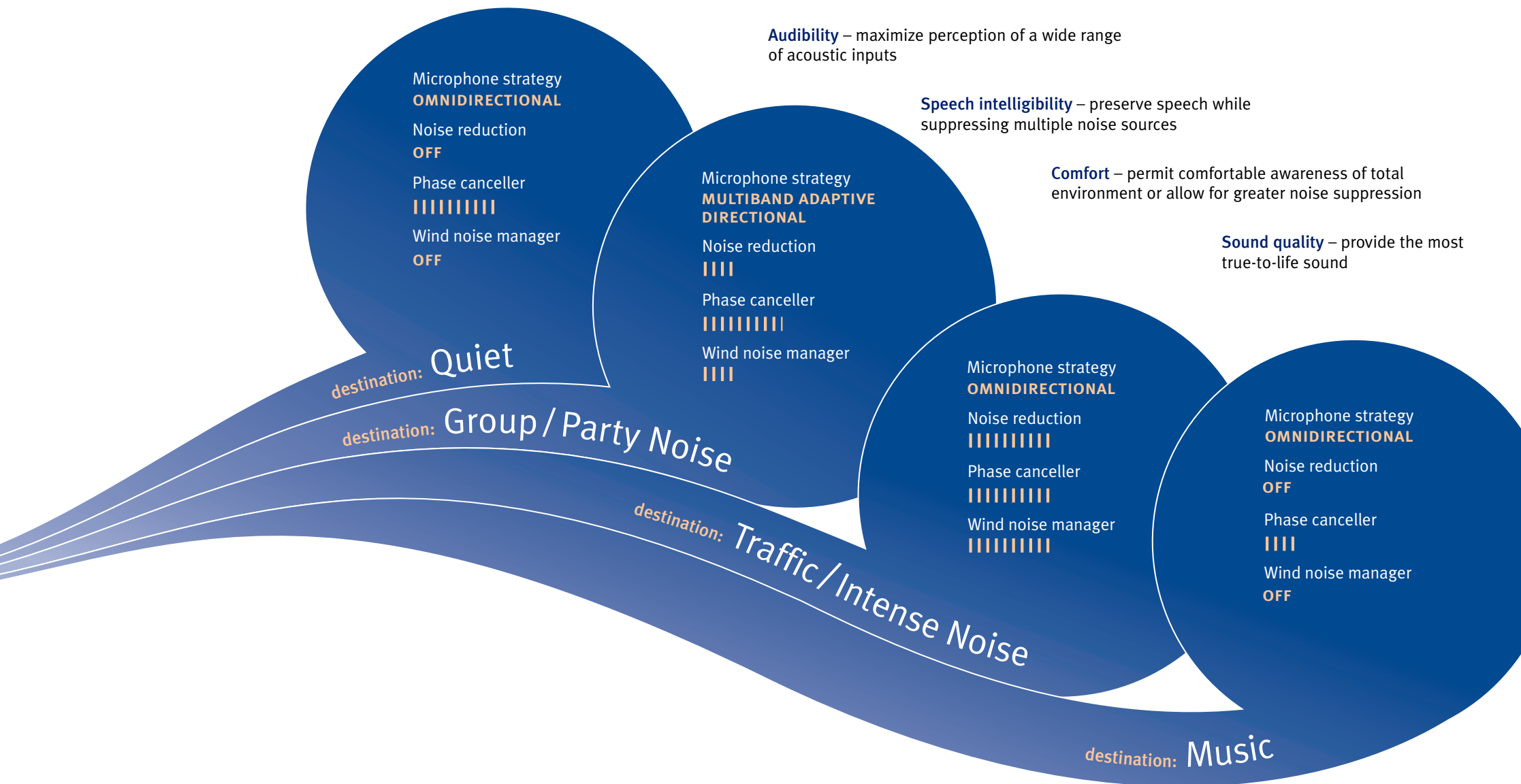
INTELLIGENT SOUND CLASSIFICATION
Indigo's new hardware platform, allows its sound classifier to continuously collect, analyze more acoustic characteristics of the environment, assessing several components to determine the nature of incoming signals at a faster speed. These criteria include, but are not limited to, intensity, modulation depth, modulation frequency and spectral variance. The classifier then determines, in real time, which of autoPro4's four sound destinations will provide the ideal listening results.

Classifier

autoPro::4

AutoPro4 encompasses four independently controlled programs in one sophisticated package. Adaptive features may be turned on or off and their degree precision-tailored to achieve audiological goals within each of the four sound destinations.

Audibility – maximize perception of a wide range of acoustic inputs

Speech intelligibility – preserve speech while suppressing multiple noise sources

Comfort – permit comfortable awareness of total environment or allow for greater noise suppression

Sound quality – provide the most true-to-life sound

destination: **Quiet**

Microphone strategy
OMNIDIRECTIONAL

Noise reduction
OFF

Phase canceller
| | | | | | | | |

Wind noise manager
OFF

destination: **Group / Party Noise**

Microphone strategy
MULTIBAND ADAPTIVE DIRECTIONAL

Noise reduction
| | | |

Phase canceller
| | | | | | | | | |

Wind noise manager
| | | |

destination: **Traffic / Intense Noise**

Microphone strategy
OMNIDIRECTIONAL

Noise reduction
| | | | | | | | | |

Phase canceller
| | | | | | | | | |

Wind noise manager
| | | | | | | | | |

destination: **Music**

Microphone strategy
OMNIDIRECTIONAL

Noise reduction
OFF

Phase canceller
| | | |

Wind noise manager
OFF

destination:
Quiet

No compromise

While noisy environments typically pose the greatest difficulty, quiet situations come with their own challenges. This is particularly evident in single-program automatic instruments, which must strike an adequate – and unalterable – compromise for both quiet and noisy situations.

Indigo, on the other hand, uses industry established fitting formulas and wearer validated default settings for quiet environments, resulting in a no-compromise, situation specific outcome. Indigo also gives fitters complete flexibility to change the adaptive strategy: if, for example, your client prefers directionality in quiet, rather than the usual omnidirectional, this individualization is very easily accomplished.

Quiet enjoyment is personal

Even in quiet situations, some clients may prefer some degree of noise reduction or directionality. Indigo makes it easy to deliver these outcomes and satisfy individual preferences.

Adaptive features:
Choose wearer validated defaults or make quick and easy customizations

Frequency response
Industry established fitting formulas ensure audibility based on research-backed evidence

Microphone strategy: Omnidirectional
Amplifies all surrounding sounds for better awareness and localization

Noise reduction: Off
Minimizes interference with speech signals

Phase canceller: On
Medium – minimizes potential feedback

Wind noise manager: Off
Typically not a concern in quiet environments

I deliver connection.

destination:
Group / Party Noise

Understands the challenges of noise

The instant Indigo's sound classifier determines a group/party situation, optimized speech in noise settings are activated, independent of random inputs. Unlike traditional single-program automatic instruments, Indigo differentiates group/party noise from traffic/intense noise, and manages these situations uniquely for superior listening outcomes.

Speech matters

Indigo allows you to specify the frequency response and level of all adaptive features for the greatest speech intelligibility in noise. Alternatively, simply quick-fit with industry accepted fitting formulas and wearer validated default settings.

Adaptive features:
Choose wearer validated defaults or make quick and easy customizations

Frequency response
Adjusts low frequencies of loud inputs to minimize noise

Microphone strategy:
Multiband adaptive directional
Preserves target zone while reducing multiple noise sources from all other directions

Noise reduction: On
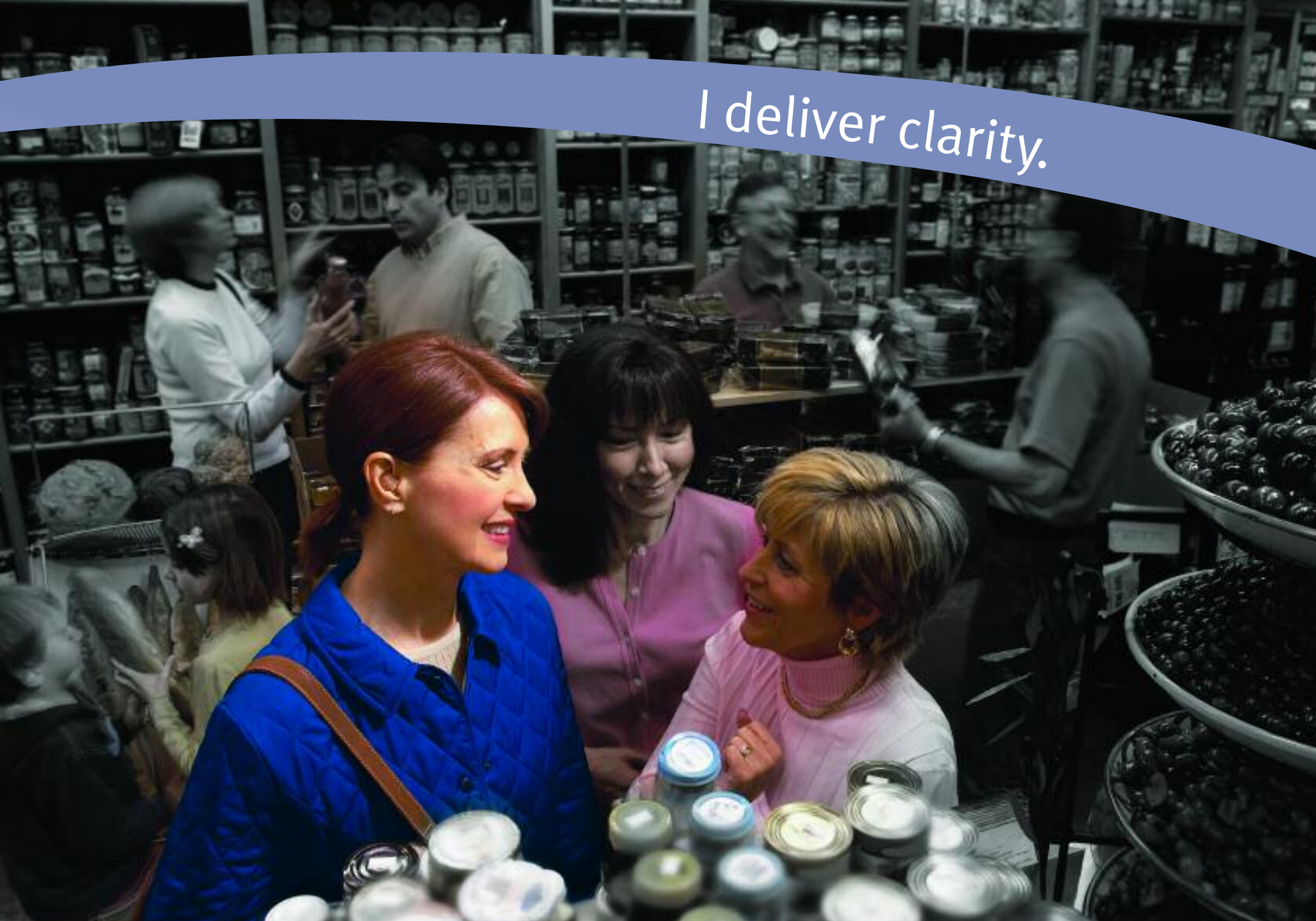Mild – Minimizes interference of noise with speech signals

Phase canceller: On
Medium – minimizes the possibility of feedback from sudden changes in feedback path

Wind noise manager: On
Mild – automatically engages in presence of wind for added listening comfort

I deliver clarity.

destination:
Traffic / Intense Noise

Comfort and protection

The challenges of hearing speech in noise aren't the same as those experienced in intensely noisy environments – so why treat them the same? Indigo manages each of these distinct sound destinations differently, applying the most effective technologies and strategies to the situation. When Indigo's sound classifier detects intense noise, the focus shifts to maximizing comfort.

No two situations are alike

Unlike single-program automatic instruments where changes made to group / party noise are automatically applied to intense noise settings, Indigo ensures the frequency response and adaptive features strategies meet each situation's unique demands.

Adaptive features:
Choose wearer validated defaults or make quick and easy customizations

Frequency response
Decreases overall gain

Microphone strategy: Omnidirectional
Maintains connection with surrounding environment

Noise reduction: On
Moderate – maximizes comfort in noise without suppressing speech signals

Phase canceller: On
Medium – minimizes annoying feedback caused by objects brushing close to the ear

Wind noise manager: On
Moderate – automatically engages in presence of wind for added listening comfort

I deliver comfort.

destination:
Music

Music appreciation

Until now, music has simply presented too many difficulties for a traditional automatic listening program. Single-program automatic instruments place ultimate importance on speech at the expense of music, while "always-on" adaptive features play havoc with the extreme variations in music signals.

AutoPro4's sound classifier instantly distinguishes music from other complex sound environments and automatically engages the music destination. Here, adaptive features that might interfere with music can be turned off, while others, such as the microphone strategy and phase canceller, are optimized for true listening pleasure.

Slow down and enjoy the music

By slowing the response time of the phase canceller in the music destination, Indigo prevents the sudden, intense harmonic signals characteristic of music from triggering unwarranted activation of the phase canceller.

Adaptive features:
Choose wearer validated defaults or make quick and easy customizations

Frequency response
Higher fidelity and accurate reproduction of tonal sound through more linear amplification and broad band frequency response

Microphone strategy: Omnidirectional
Preserves sounds from all directions

Noise reduction: Off
Minimizes interference with music

Phase canceller: On
Slow – optimized setting addresses feedback and minimizes possible interference

Wind noise manager: Off
Minimizes interference of adaptive features with music

I deliver sound quality.

U:fit™
delivers simplicity.

Enhanced software uncomplicates the sophisticated fitting

U:fit™ is our newest generation of fitting software and it builds on all the advantages of Unitron Hearing's Unifit™ fitting software. New enhancements make successful fittings easier than ever, with more intuitive design and user-friendly navigation. U:fit puts Indigo's precision-fitting capabilities and control at your fingertips, delivering faster, more successful fittings that increase spontaneous acceptance.

U:FIT ADVANTAGES

▶ A fresh face: clean, intuitive and easy-to-navigate screens

▶ Workflow-oriented: client-centered fittings guide you through proven workflow patterns

▶ Effortless navigation: you're always just one click away from home and one click away from every feature and control

Let's make this easy

Access all of Indigo's sophistication through U:fit's simple-to-use, easy-to-navigate fitting screens. You have the control to customize the automatic and manual programs, if you choose.

I deliver
real-world information.

Actual wearer data improves fine-tuning results

Understanding that the follow-up appointment can be as critical as the initial fitting in delivering client satisfaction, Indigo features advanced data logging technology. Data logging delivers detailed, real-world usage information that positions you to respond quickly and accurately to your clients' observations, resulting in more successful fittings and improved customer satisfaction.

WHAT DATA LOGGING TELLS YOU

▶ Start date

▶ Hours of use

▶ Average use per day

▶ Relative time in autoPro4 destinations versus manual programs

▶ Percentage of time in each autoPro4 destination

▶ Volume adjustments made in each autoPro4 destination

There's no substitute for experience

Data logging delivers real-world wearer information for simplified, more accurate adjustments and more targeted and effective client counseling.
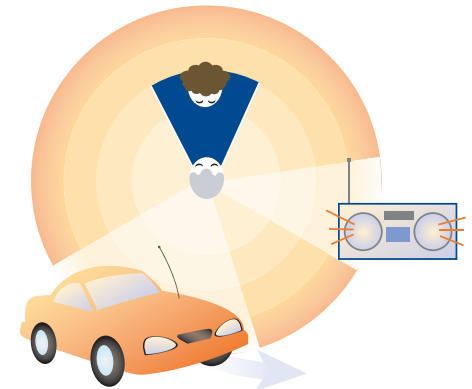
Sophisticated
adaptive feature set.

Selectively activate and control features for superior listening outcomes

Multiband adaptive directional

Tracks and suppresses moving noise sources

Suppresses up to 16 noise sources

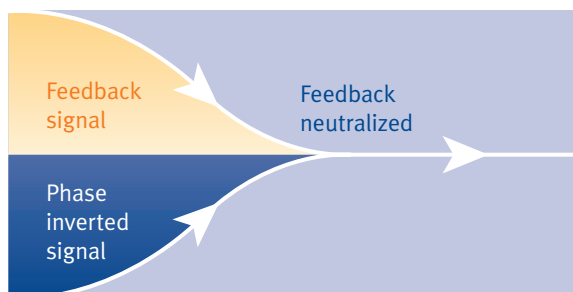**Concurrently manages moving and stationary noises**

FLEXIBLE STRATEGIES AND MULTIPLE NOISE SOURCE SUPPRESSION
Indigo manages even the most challenging listening situations with an unprecedented range of directional strategies, including the ability to manage multiple, moving noise sources. While fitting, choose the best strategy – omnidirectional, fixed directional, or multiband adaptive directional – for each autoPro4 sound destination, as well as Indigo's three optional manual programs.

The instant background noise is detected, Indigo places a null point at the loudest noise source, while preserving the target zone. Even moving noise sources, such as a car driving by, are tracked to maintain the most favorable signal-to-noise ratio.

Indigo manages up to 16 noise sources simultaneously to reduce background noises from multiple sources and directions.
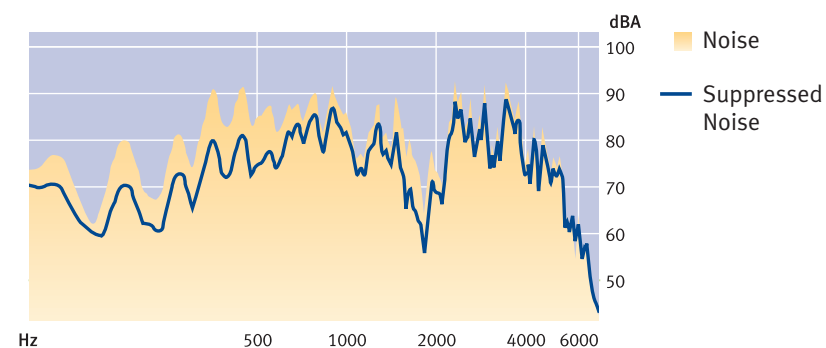
Indigo tracks multiple noise sources, both stationary and moving. Up to 16 null points follow background noise sources outside target areas in 16 frequency bands. Each band features independent adaptive directionality, allowing the loudest noise in each channel to be precisely managed.

Phase canceller

SLOW, MEDIUM AND FAST SETTINGS TO PRESERVE THE RIGHT SOUNDS

Indigo's highly advanced phase canceller protects against the discomfort and embarrassment of whistling from the hearing instrument by continuously monitoring for feedback peaks. When feedback is detected, Indigo calculates and suppresses it with a counter-signal that doesn't affect gain for speech and music cues. Slow, moderate and fast settings can be easily adjusted within each autoPro4 sound destination and the manual listening programs to meet the unique demands of every situation.

Noise reduction

ADJUSTABLE TO ENSURE THE BEST STRATEGY FOR EACH LISTENING ENVIRONMENT

Indigo identifies the presence of noise across 16 channels, decreasing gain where noise signals are dominant to provide greater listening comfort and decrease user fatigue. The ability to specify the precise degree of noise reduction – off, mild, moderate or maximum – within each autoPro4 sound destination and the manual listening programs ensures the ideal strategy for every listening situation.

I deliver
convenience.

Features make everyday use easier

Wind noise manager

Indigo's adaptive wind noise manager detects and adapts to the presence of wind. The wind noise manager can be turned off or pre-set to mild, moderate or maximum, based on the listening needs within each automatic destination and manual program. In mild to moderate wind, clients won't miss out on what's being said because gain is reduced in only the low frequency channels containing wind energy. In high wind, Indigo protects comfort by reducing output in all affected channels.

Automatic telephone solution

Indigo's unique telephone solution, easy-t, senses the proximity of a telephone or cellular phone and automatically switches to the telephone program for either telecoil* or an acoustically fitted phone program. When the phone is put down, Indigo instantly returns to the listening program previously in use. Easy-t ensures interference-free use of both cellular GSM and DECT phones and is optional in both custom and BTE styles.

* Requires telecoil compatible phone or use of a supplementary magnet

Volume control

Ideal volume indicator

The ideal volume indicator puts an end to fumbling with the volume control: when clients reach the volume setting you've recommended, they'll hear a single indication beep.

Intuitive volume control

Many hearing instrument wearers prefer the intuitive "feel" of a conventional manual volume control with distinct starting and stopping points. This quickly familiarizes clients with their volume range and, coupled with the ideal volume indicator, facilitates locating the ideal volume position.

Manual programs

In addition to the four automatic sound destinations in autoPro4, Indigo offers up to three manual programs. These can be programmed for unique requirements, or if desired, settings from any autoPro4 destination can be instantly duplicated for any of the manual programs.

The look of
Indigo.

Indigo is available in a full range of styles, from the tiniest custom CICs through to a choice of BTEs with or without volume control and power BTE. An array of colors is available, including contemporary metallics and colorful translucents – be sure to watch for the new indigo colored shell.

Styles	Battery Size	dB SPL 2cc		dB SPL EarSimulator	
		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 (no VC)	13	55 dB	125 dB	61 dB	131 dB

Indigo is available in a full range of styles and colors including our new indigo colored shell (complete range not shown).

Performance Profile

Range of loss	Mild to severe
Channels	16
Processing types	4-level processing

Features

Autoprogram	AutoPro4 with four sound destinations
Manual listening programs	3
Ability to disable listening programs	● manual programs only
Directionality	16-band adaptive directional (except CIC, MC)
Data logging	●
Feedback management	Phase canceller
Noise reduction	●
Wind noise manager	●
Ideal volume indicator	●
Manual volume control	● (except CIC), optional on 13 BTE
Start-up delay	●
Telephone solution	Easy-t Optional on custom and BTE
Telecoil	● Optional on custom
MLx compatible	●
Program beep indicator	●
Low battery warning	●

I am Indigo. I deliver.

indigo™

Unitron Hearing is committed to improving the lives of people with hearing loss by developing high-quality hearing solutions that incorporate practical features to solve the everyday challenges and concerns they have with hearing loss and hearing aids. This commitment also benefits you, the hearing healthcare professional, with practical fitting options, support when you need it and the ability to offer solutions that address what matters most to your clients.