Oticon | Sumo DM

Make the world louder!

Proven ultra power amplification for extreme audibility

oticon
PEOPLE FIRST

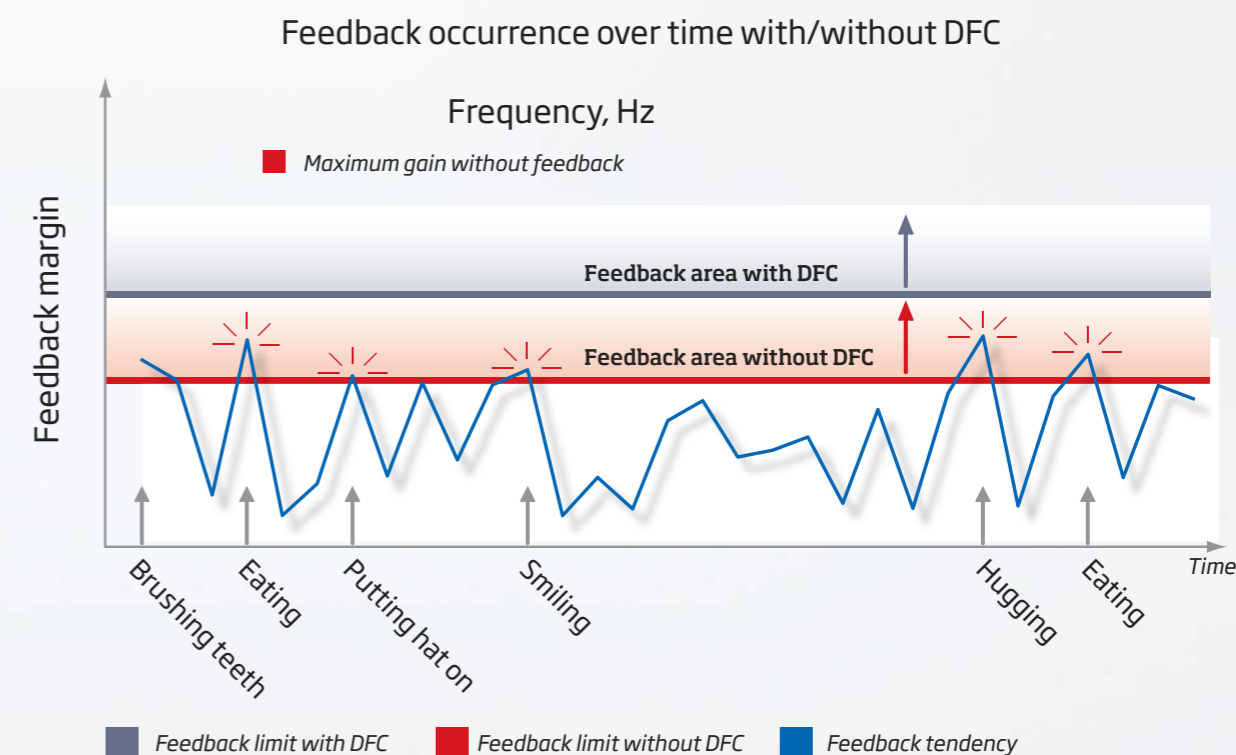# Power and dynamic Feedback Management

Sumo DM can fulfil the output needs of even your most demanding clients - even those needing extra low frequency power. A peak MPO of 144 dB SPL and an 85 dB full on gain require an efficient anti-feedback system. The original Dynamic Feedback Cancellation (DFC) in Sumo DM protects the user from feedback occurrence.
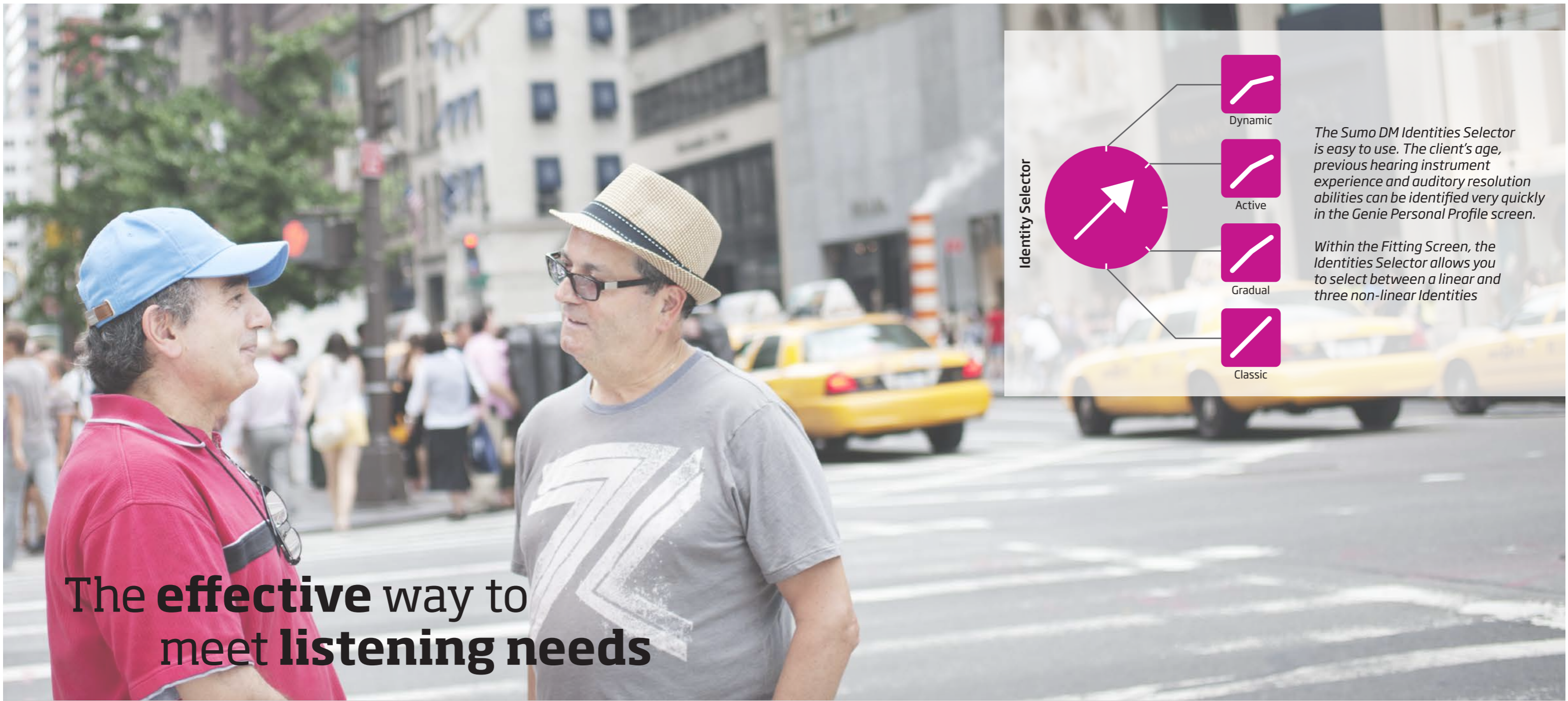
Feedback management
The core technology of the system is phase inversion. The feedback loop is cancelled out by applying the phase inverted signal. When successfully processed, phase inversion leaves the signal clean and comfortable.
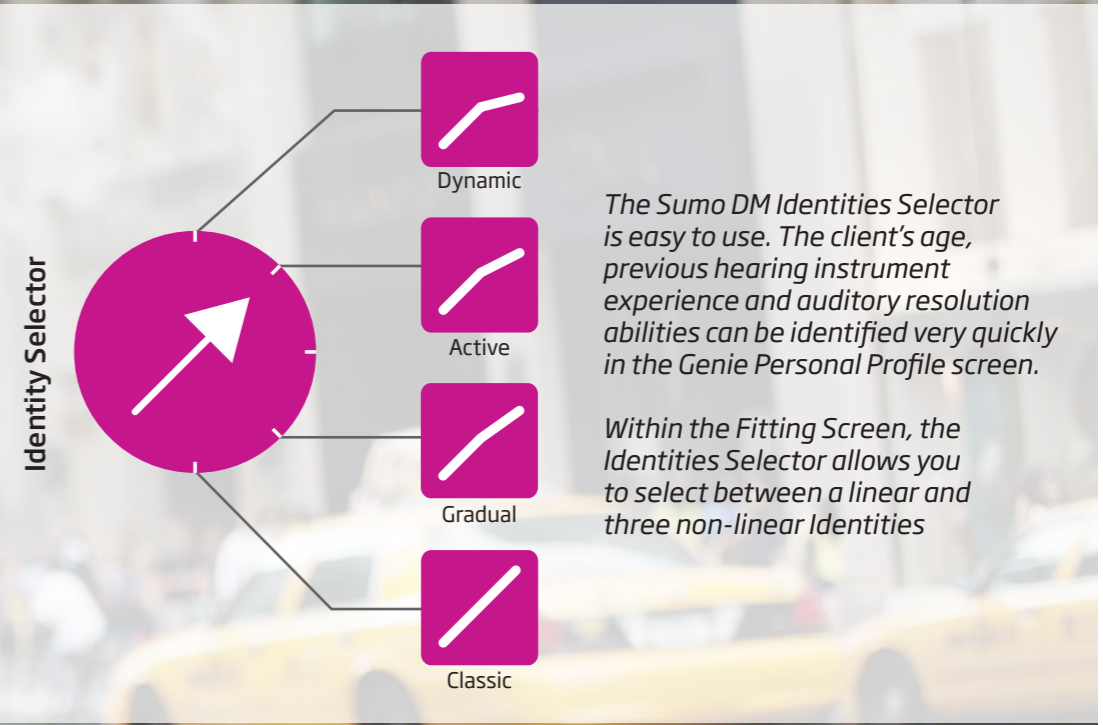
Smart volume control without feedback
The Feedback Manager is a crucial fitting tool for initialising the DFC and volume control systems, allowing you to consider individual ear mould characteristics. The Feedback Manager operates across all eight channels to determine the exact gain settings allowed within each channel. This primes the DFC for optimal operation and allows your client full use of the Volume Control, maximising gain across all frequencies within the set limits for optimal audibility, without invoking feedback.

Make the world louder!

Sumo DM has a unique ability to maximise audibility and sound comfort for your most challenging clients. Using classic DSP technology, it constantly adapts to changing sound environments to optimise access to speech in noise.

Recognising the diversity in hearing capabilities for this group of users, Sumo DM offers a large degree of flexibility to ensure the right fitting for each client´s listening needs.

All this is delivered in a durable instrument with a long battery life, which has proven it´s worth time and time again.

Feedback occurrence over time with/without DFC

Frequency, Hz

■ Maximum gain without feedback

Feedback margin

Feedback area with DFC

Feedback area without DFC

Brushing teeth   Eating   Putting hat on   Smiling   Hugging   Eating   Time

■ Feedback limit with DFC   ■ Feedback limit without DFC   ■ Feedback tendency

Dynamic

Active

Gradual

Classic

The Sumo DM Identities Selector is easy to use. The client's age, previous hearing instrument experience and auditory resolution abilities can be identified very quickly in the Genie Personal Profile screen.

Within the Fitting Screen, the Identities Selector allows you to select between a linear and three non-linear Identities

The **effective** way to meet **listening needs**

People with severe-to-profound hearing loss require a holistic solution if they are to readily embrace a digital Ultra Power instrument – and this is precisely what Sumo DM offers.

With these clients, it is important to reach beyond the audiogram. Sumo DM's Identity-based fitting strategy is specifically designed to accomplish this. Each of the four Sumo Identities offers a unique sound processing strategy to meet each client's listening needs, enabling you to easily select the optimal starting point for a fitting.

The challenge of meeting your client's amplification needs

For a fitting to be successful, considerations beyond the hearing loss should be taken into account: age, previous experience with non-linear or linear instruments, co-morbidities and auditory resolution capabilities. These factors have a significant impact on a person's ability to process sound signals, e.g. clients with good auditory resolution capabilities can benefit from more complex sound signals. The four unique Sumo DM identities provide an easy way to incorporate these parameters into the fitting process.

Sumo DM identities: different strategies for individual listening needs

The Sumo DM identities are designed to provide a closer initial match to the hearing profile. The Sumo DM identity prescribes the DSEsp (Dynamic Speech Enhancement for super power) loudness model through adjusting the amount of gain, the compression characteristic and the dynamics across the eight independent channels, to fit the listening needs, of the user. Importantly, the identities offer a fine-tuning tool for easy comparison of different strategies. The identities ensure that the TriState Noise Management system functions in synergy with the DSEsp loudness model to match the user's preferences.

Sumo DM has a wide range of fitting strategies. In addition to the four Sumo DSEsp identities, you can choose between a range of linear rationales: DSL Lin, NAL-RP and POGOII+BC.

Speech-controlled
Noise Management

Users of Ultra Power instruments can be very challenged when trying to understand speech in noisy situations. TriState Noise Management in Sumo DM differentiates between three distinct listening situations. The noise management system constantly monitors the client's environment for speech and noise and responds quickly and seamlessly to all changes in sound.

▶ **Speech in quiet** – where the system remains inactive

▶ **Speech in noise** – where moderate speech-shaped attenuation is applied

▶ **Noise only** – where stronger noise reduction is applied

TriState Noise Management preserves the speech cues and provides an excellent balance between audibility and listening comfort.

Reliable
and **versatile**

People with severe-to-profound hearing loss are highly dependent on their hearing instruments in day-to-day life. Sumo DM is built to provide year-round reliability in even the most demanding conditions and is **IP58** classified.

Complete versatility
Sumo DM offers a unique array of user controls and a full programme for assisted listening. It includes three OFF options to accommodate your client's personal preferences and to allow quick muting of the instrument while on the ear.

▶ VC: tactile OFF-click in VC wheel when turned to its lowest position

▶ Program switch: OFF position can be programmed in software (optional)

▶ Battery door: Instrument is OFF in open position for the 675 battery

Accessory programme
Ultra Power users frequently use teleloop, FM systems and DAI devices. Sumo DM's accessories programme was developed with this in mind. Whether at home, at work or in school the design integrated adaptor shoes and receiver ensure consistent input.

Paediatric features
Sumo DM includes an LED status indicator. The LED option indicates that the instrument is ON and that the battery is functioning. Additional functionality include flashing for power-up and programme indication as well as when the preferred VC level is reached. The LED status indicator and tamper resistant battery door is particularly useful for children and adults who require caregiver assistance.

SOLID COLOURS

10 Beige	11 Light Brown	12 Dark Brown	37 Black	13 Light Grey	14 Dark Grey	40 Baby Blue	41 Baby Pink

TRANSPARENT

30 Transparent	31 Yellow	32 Orange	33 Pink	34 Purple	35 Blue	36 Green

People First

People First is our promise
to empower people
to communicate freely,
interact naturally and
participate actively

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