



Melodyflex

LIGHT WEAR FOR A
POWERFUL HEARING

Bone Conduction Headset

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Melody Flex, the new bone conduction headset is AUTEL's solution to improve hearing quality of those affected by hearing loss treatable by bone conduction.

Melody Flex can be applied especially to those who suffer from hearing impairment due to physical deformities that limit the application of other hearing aids.

Melody Flex is a form of alternative conduction to the bone conduction spectacles. It is highly suited to those affected by hearing loss who seek an effective solution, that is also discreet and elegant.



Light, discreet and elegant

Melody Flex has been designed with materials that have been chosen in order to obtain an object which is light to wear and has a refined design so to offer a comfortable and pleasant use.

Melody Flex wants to give those who wear it a feeling of comfort and confidence.

Sound Performance

The new Autel bone conduction headset is provided with **Autel Flex** technology and an innovative **telescopic system**, that together guarantee:

- Simplicity in the fitting of the aid without having to resort to surgery or to substituting parts
- Elevated flexibility for a complete adaptability to the patient
- Highest bone conduction adherence to the mastoid area





All shapes in a few simple actions

Melody Flex is thought to make the professional's fitting of the aid easy and to ensure a perfect adherence of the hearing aid to any physiognomy. Thanks to the several joining and bending points together with Autel Flex system the aid guarantees the highest adherence of the bone conductor to the patient's mastoid area.

A telescopic system and 4 joining points for a complete adaptability to any patient



Thanks to its **4 mechanical joining points** together with the **telescopic system**, Melody Flex ensures **a complete adaptability to any physiognomy**. The fitting telescopic system is simple and it permits an easy positioning of the conductor on the mastoid area.

The aid can be adapted to the right size by adjusting a single screw on its back side.

From the band to the bone conductor:
a perfect adherence for a superior performance

The high flexibility of the entire structure permits remarkable pliancy.

The necessary reshaping can be applied both to the headset and to the bone conductor. Thanks to *Autel Flex* technology, the terminal can be rotated in any position so to reach the maximum adherence to the mastoid area and therefore obtaining the best sound performance.



Flexible



Autel Flex technology is a revolutionary innovation in the world of bone conduction hearing aids.

With Autel Flex system the fitting of the hearing aid becomes faster and more efficient thanks to the cold shaping process. This process, in comparison to the traditional hot methods, permits the audiologists to achieve sooner and in an easier way an absolutely precise setting of the bone conduction on the patient's mastoid area.

Simple and performing



The performance is improved through the innovative **cold shaping method** that allows the expert to perform a more precise fitting operation of the bone conductor to the mastoid compared to the traditional methods.

This means obtaining results that are clearly better both in the adherence and consequently in the aid's sound output.

Powerful

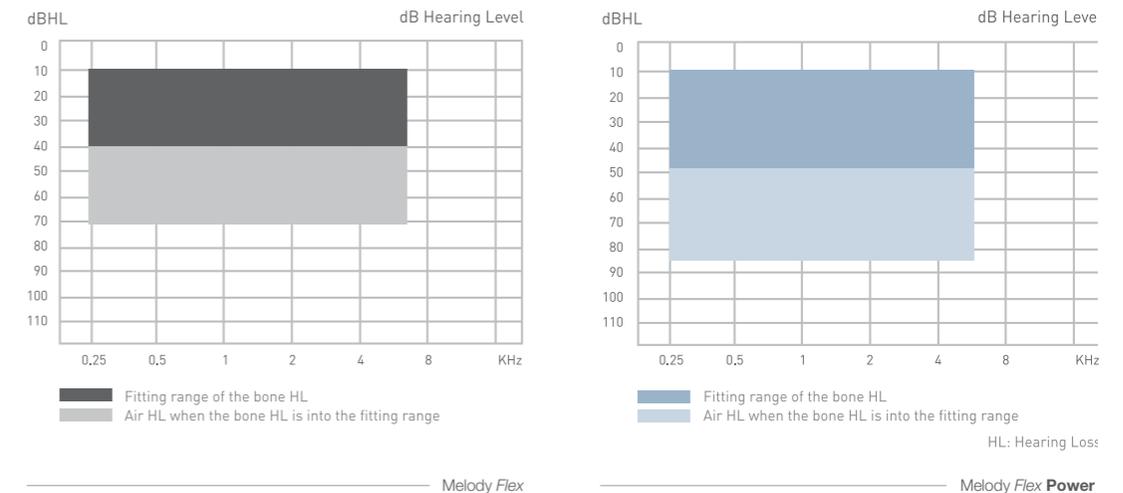


Power

POWER technology is a stronger version of the hearing aid's bone conductor that consequently has an increased power compared to the standard one.

Thanks to this technology the field of hearing loss types treatable with Melody Flex bone conduction headset is widened, providing the audiologists with a modern instrument more and more precise in the treatment of these kind of pathologies.

Fitting range comparison



How does the bone conduction hearing aid work

A bone conduction hearing aid allows the patient to hear skipping the middle and the external areas of the ear.

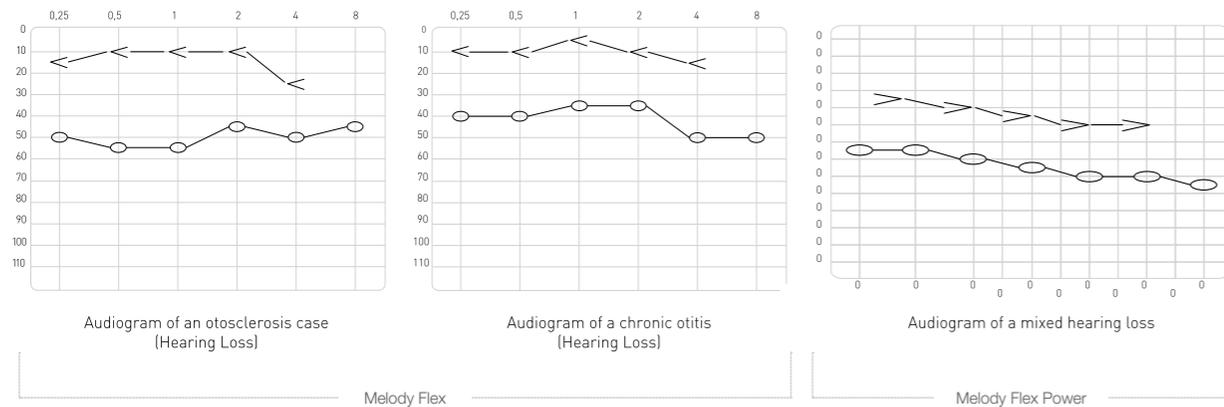
The microphone captures the sound, the internal circuit amplifies it and the bone conductor transforms it into mechanical vibrations.

The vibrations are then sent to the mastoid bone and consequently to the internal area of the ear where they are transformed into nervous impulses, perceived by the brain as sounds.

The bone conduction hearing aid represents an effective treatment for a number of hearing loss cases due to:

- Chronic otitis
- Radical middle ear surgery
- Chronic middle ear infection
- Ear inflammation/external ear infection
- Dermatitis
- Eardrum perforation

Bone conduction application cases



The open ear system option as an alternative to ear canal obstruction

The application of an open ear hearing aid avoids several annoyances, such as obstruction, even partial, of the external ear canal, which may cause dissatisfaction for many reasons, such as:

- Variation of ear's natural acoustics, which is the source of acoustic information and sound stimulation (in the 2-3 kHz sound band)
- Excessive amplification of the low frequencies resulting in a feeling of rumble and loss of higher frequencies
- Autophony phenomenon: altered hearing of one's own voice

The application of bone conduction hearing aid is an effective alternative to implantable hearing aid

The surgical solution is invasive, expensive and has an impact from an aesthetic point of view and it is also not reversible.

	Bone application	Semi-implantable application
Sound quality	✓	✓
Appearance	✓	✗
Non obstructive	✓	✓
Non invasive	✓	✗
Price	✓	✗



Comfortable and elegant

Autel pays great attention to the design of its hearing aids.

Melody Flex, just as all Autel products, is inspired by the traditional excellence of the **Made in Italy**.

It pays attention to every small detail and to the materials so to obtain the highest balance between sound performance and style.



Personalise it with various colour combinations

With Melody Flex one can personalise the combinations choosing various colour options for the headset's cover and both the hearing aid and bone conductor.



Discover all the possible chromatic variations

For the complete catalogue of all the colour variation available for the headset and for the hearing aid please visit the Melody Flex page on our website www.autel-italia.it

Technical Specification

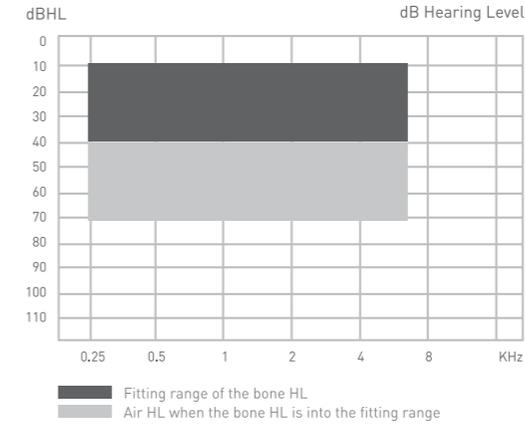
	DGT 2	DGT 4	DSP 1/M	DSP 4/M
Trimmer	2	4	NO	NO
Low tone control	YES	YES	YES	YES
High tone control	NO	YES	YES	YES
Gain control	YES	YES	YES	YES
Volume control	YES	YES	YES	YES
Power control	YES	YES	YES	YES
M-T switch	YES	YES	YES	YES
High GSM immune microphone	YES	YES	YES	YES
Acoustic warning for low battery	YES	YES	YES	YES

DGT Digital programmable with trimmers
DSP Digital programmable using AUTEL software

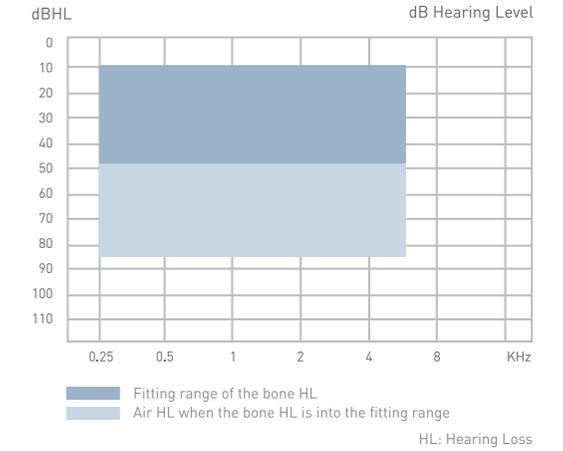
	Melody Flex	Melody Flex Power
Output force level max		
Peak	108 dB rel. 1µ N	115 dB rel. 1µ N
1.600 Hz	96 dB rel. 1µ N	103 dB rel. 1µ N
Mechanical-acoustic sensitivity level (AMSL)		
Peak	37 dB	48 dB
1.600 Hz	26 dB	35 dB
Mechanical-acoustic sensitivity level (RTG)	21 dB	30 dB
Frequency range	250 Hz 5000 Hz	250 Hz 4500 Hz
Equivalent input noise level	28 dB rel. 1µ N	35 dB rel. 1µ N
Maximum coil sensitivity (10mA/m)	67 dB rel. 1µ N	79 dB rel. 1µ N
THD Total harmonic distortion (500 / 800 / 1600 Hz)	< 2,5 / 0,2 / 0,1 %	< 2,5 / 0,2 / 0,1 %
Battery current	< 1,6 mA	< 1,5 mA
Battery type (Zinc-air)	675	675
Average battery life	@ 310 h	@ 310 h
Reference test frequency	1600 Hz	1600 Hz

Fitting Range

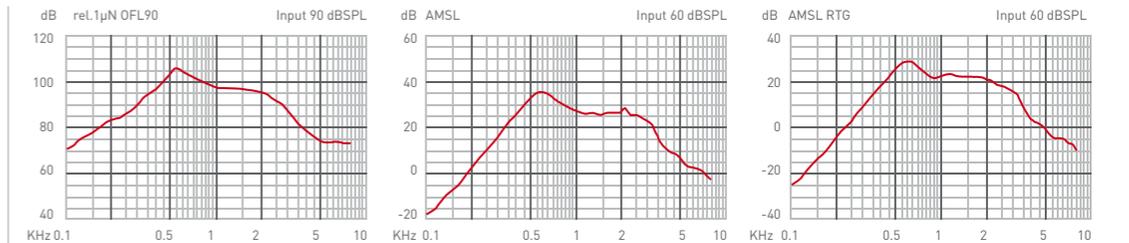
Melody Flex



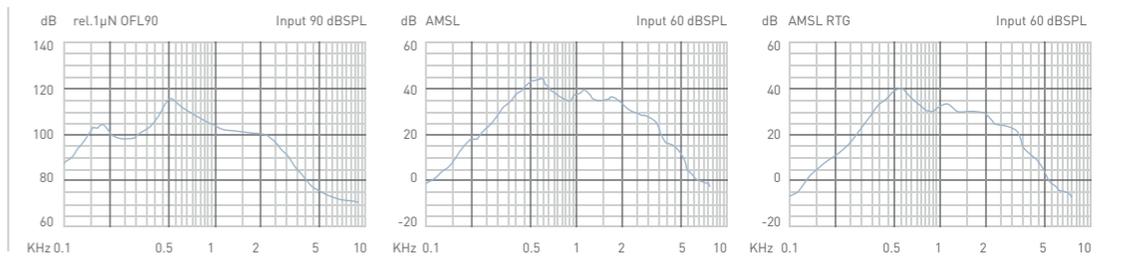
Melody Flex Power



Melody Flex



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MEASURING CONDITIONS
 Individual patient results may vary.
 CEI 29-13 (IEC118-9)
 Artificial mastoid type: B&K 4930

Environmental conditions:
 T = 23° +/- 5°
 RH = 40-80%
 PA = 101,3 kPa

Operating voltage: 1,3 Volts
 Tolerances:
 +/- 4 dB up to 2kHz
 +/- 6 dB up to 4kHz



At Autel we have been working 40 years on ideas and solutions to improve the quality of life for people affected by hearing impairment

The sense of our mission is to continue to invest in research and in technology to give the best support we can to this cause.

Behind the safety and reliability of Autel hearing aids there is a team of researchers that follows closely every technological innovation in the world's audiology sector.

Highly trained technicians, working with sophisticated hi-tech equipment, work on all the elements gathered by the research group, to design and produce the modern Autel hearing aids.

Access to the latest advances of science inspires our technological innovations.

The various components of each hearing aid are commercially produced with modern methods that benefit from the technological knowledge of the leading companies.

Every step of the production is supported by specific machinery and every phase is subject to constant checks, to ensure that each product conforms to the quality standards demanded by Autel.



www.autel-italia.it



Melody Flex is a product of **Autel S.r.l.**

Via Taormina, 1 - 00041 Pavona (Rome) - Italy

Ph. +39 06 93 111 31

Fax +39 06 93 100 76

info@autel-italia.it

www.autel-italia.it



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REV 1-2014

CE 0476