

AURITEC

AT2000

Innovation Trust Precision



AURITEC has been known as a technology leader in clinical audiometry for more than 40 years. The close contact that our family business maintains with those involved in research and practice results in constant innovations. We focus on continuity in the requests, stability in the workload and precision in the measurements. Today, we are taking on the challenge of harmonising everything we tried and tested with new ideas and modern technologies. We are ready for the new product generation.

Make a step into a new era with the AT2000 and have a look at the audiometry of the future.



Digital sound generation has replaced the analogue one. Therefore, the interior of the audiometer has been completely redesigned. For the hardware of the AT2000, we used the technology of the AT1000; we reprogrammed the software.

We use only high-quality components designed and made in Germany. Each unit is manually assembled and tested in a modular way according to the customer's needs at our plant in Hamburg.

The ergonomic control unit with the silent sliders enables precise measurements thanks to intuitive hand movements and constant contact with the patients. With this technology we have established a standard in German hospitals.

Hardware

After many decades of experience, we know how to provide you with a sophisticated combination of the various elements which are subject to a daily use. In addition to the control unit and the loudspeakers, we have a PC configured for us that is precisely tailored to the audiometer's requirements and is manufactured for us in Germany.

The technology of the audiometry module was designed by AURITEC and is assembled in Germany. We only implement state-of-the-art components and electronic parts. In addition to the performance of the chips, component availability for the next few years is one of our main concerns.



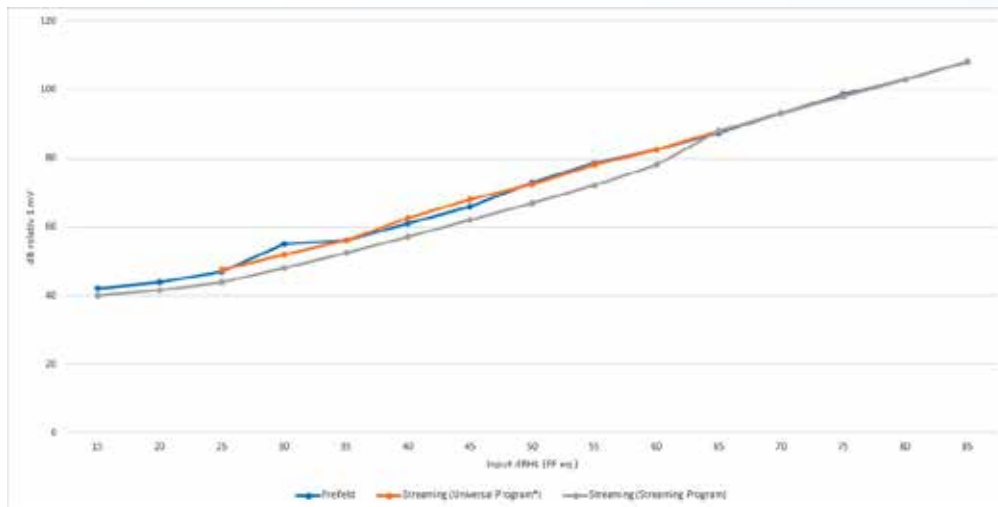
The masterpiece is the surround module. We have managed to develop eight speaker channels. All of them can be activated simultaneously. This way, you can independently play different signals at different volumes from multiple directions.

And if that's not enough:

You can even link two surround modules together. This gives you 16 free-field channels.

Hearing implant verification

The AT2000 allows direct control of hearing implants via a special hardware output. This offers advantages such as the reduction of interference from room acoustics and other sources or the complete renunciation of masking for monaural and dichotic measurements. The control takes place either directly by cable or via a streamer with bluetooth.



Calibration measurements ensure that a signal always has the same volume for the patient, regardless of whether it is played through loudspeakers or transmitted via the implant output of the audiometer.

In this example we show the result of a calibration check carried out in cooperation with MED-EL. Such checks basically confirmed the equivalence of the transmission paths, even though measurements will be necessary for each kind of processor.

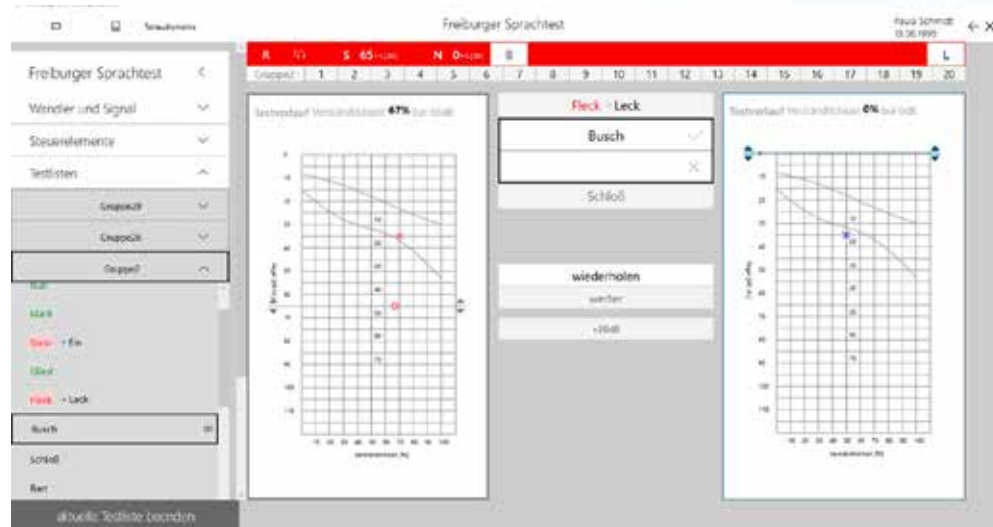
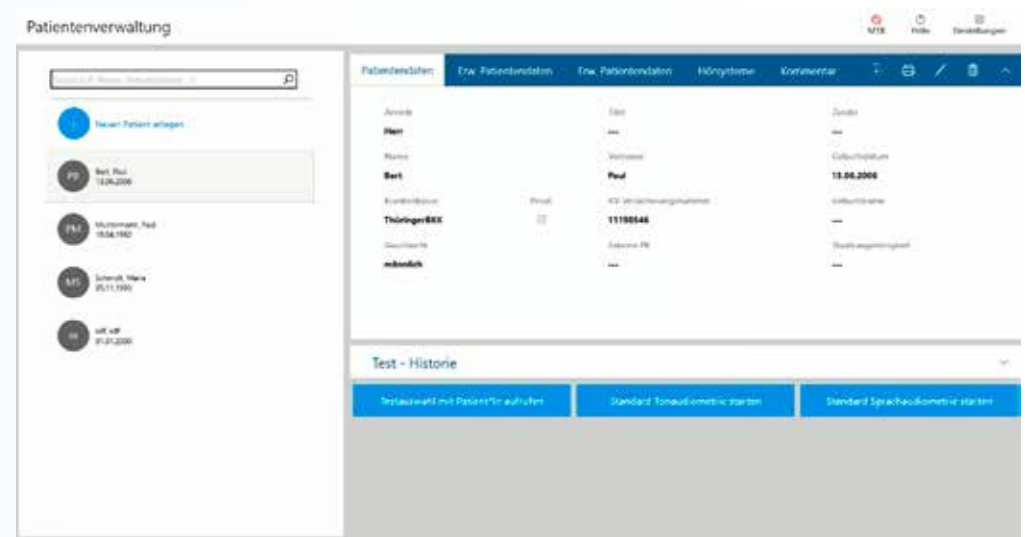
Software

We have reprogrammed the software of the AT2000 from scratch.

You receive more and more data that you want to retrieve when needed. But how do you access it quickly and clearly? For example, how can you switch between patient management and the tests?

Convince yourself of the solutions we have developed in cooperation with experts: clear interface, individual configuration of your workstation - you decide how much information is displayed.

We have expanded the storage options. Thus, the history of measurements with current and old hearing systems appears. This makes it easier to classify audiograms from the past.



You only want to see special information during a measurement?

You want the audiogram to be as large as possible? Perhaps you would also like to overview the measurement or see information about transducers and signals.

You can easily open and close the toolbar just the way you want.

The management of master data and the storage of results have also become more flexible. Master data import/export is possible from and to programmes such as Avantgarde or Innoforce. The measurement data export via GDT/XML is easy to understand. In addition, the results can be exported into a .csv file for statistical purposes.

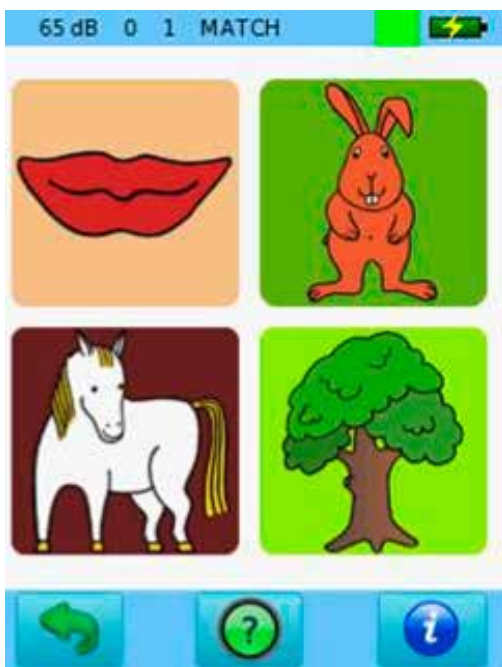
Speech audiometry

We can provide you with different tests. You choose the ones that are suitable for a good diagnosis.

In addition to the suprathreshold test procedures (SISI, Lüscher, Langenbeck, Fowler, Carhart and Stenger), the dichotic tests (Feldmann and Uttenweiler) and the monosyllabic and polysyllabic tests (Freiburger, Mainzer & Göttinger), there are also entry options for “Weber and Rinne” measurements and for tinnitus determination (also in 25Hz steps).

AURITEC was the first audiometer manufacturer to connect the Oldenburg speech tests to the AT900. We also have integrated the first foreign language tests. And again, you will get the Arabic matrix test only in the AURITEC audiometers.

Adjective	Noun	Number	Name	Verb	
جديدة	كتب	عدة	علي	يريد	Ali wants many new books.
بنية	اطباق	خمسة	نabil	اشترى	Nabil bought five brown plates.
صغيرة	كراسي	عشرة	زين	يصنع	Zain makes ten small chairs.
كبيرة	كؤوس	أربعة	ناجي	ربح	Naji won four large cups.
خفيفة	قمصان	ستة	عمر	يفضل	Omar prefers six light shirts.
حمراء	خواتم	سبعة	هاشم	لون	Hisham colored seven red rings.
قديمة	بيوت	بضع	وانل	نال	Wael got a few old houses.
ثمينة	سكاكين	تسعة	بلال	يأخذ	Bilal takes nine precious knives.
زرقاء	أعلام	ثمانية	أمين	أخرج	Amin removes eight blue flags.
جميلة	ألواح	ثلاثة	فؤاد	يعطي	Fuad gives three beautiful boards.



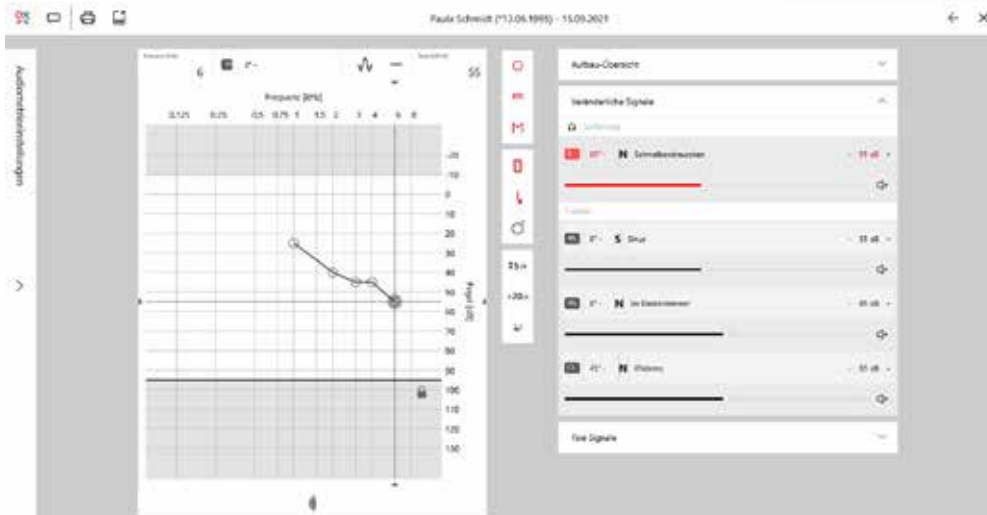
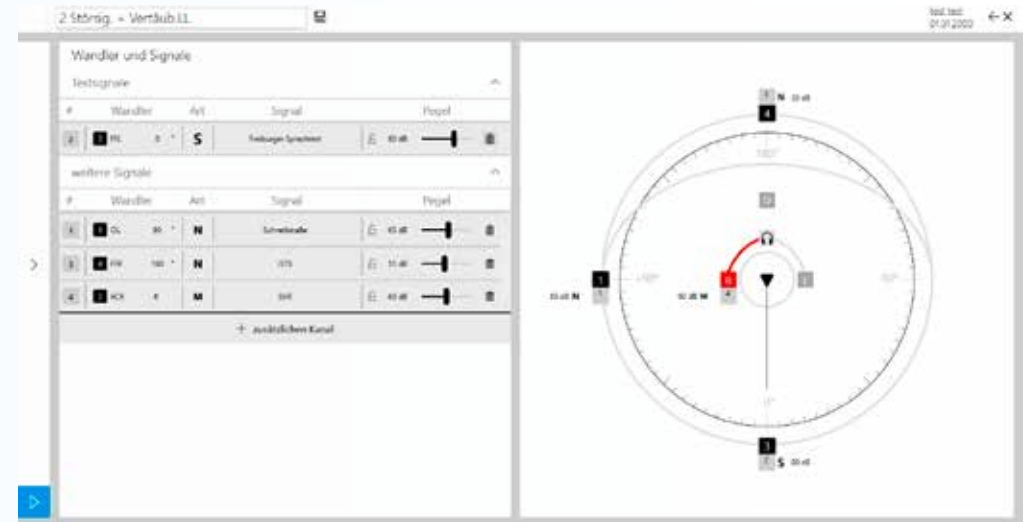
We have paid special attention to the Westra test battery. All procedures that are also available on Westra CDs can be called up directly from the software on the AT2000. This represents a considerable time saving, especially as the administration of results is simplified.

We are in contact with other research institutions to be able to offer you the newest procedures. Currently, for example, we are linking up with the new Mainz Children’s Language Test (MATCH).

Have you also developed your own test that you would like to play in the audiometer? Give us the .wav files of the speech material and, if applicable, the noise. AURITEC brings this material into the AT2000 for you as a test.

Multichannel audiometry

The AT2000 is the first clinical audiometer with more than two pure channels. This means that you can select two sound sources for the speech and noise signal via free field, but also mask one of the patient's ears with an independent signal via an insert earphone. This ensures that you really only measure the other ear, which is a great advantage especially with SSD patients

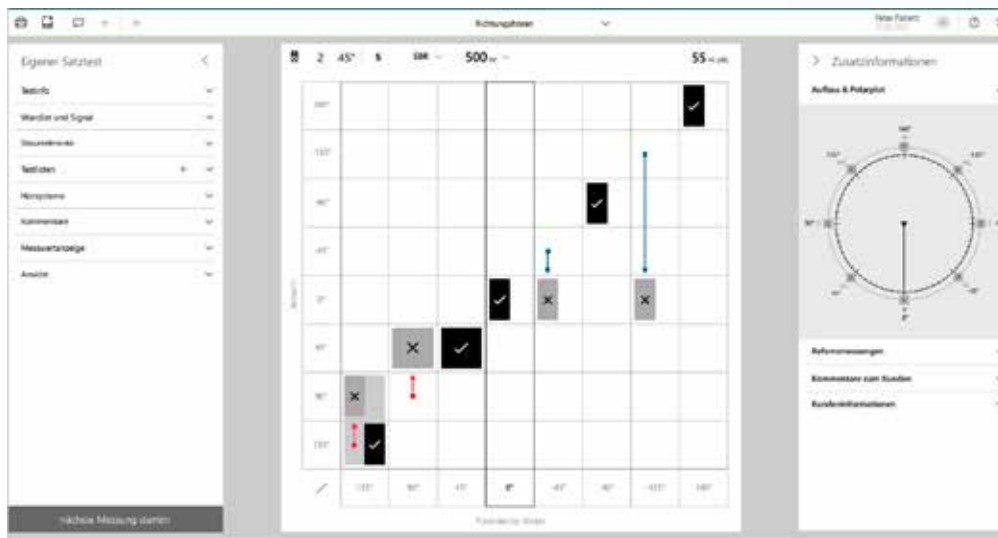
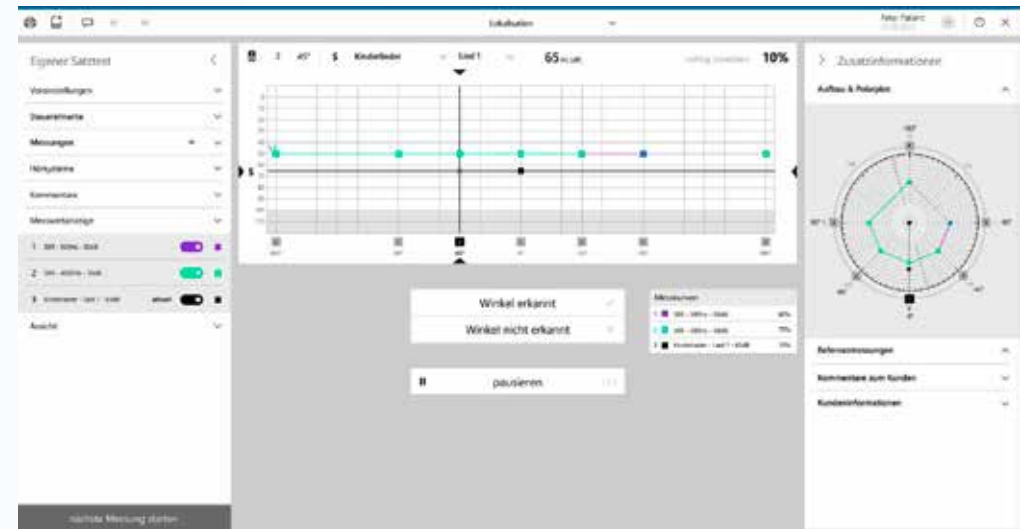


The visualisation enables a better understanding of the measurement setup. The configuration can be saved for a serie of measurements, eliminating the need for repeated re-setting.

Multichannel audiometry is possible in both pure tone audiometry and speech audiometry. You can freely choose between the outputs for air conduction, bone conduction, the two free-field outputs and the implant output as well as the free-field outputs of the surround module. You are just as free to choose the signals. However, there are also ready-made multi-channel test procedures. For example, there is the OLSA with a maximum of four channels. In this way, we provide you with an established procedure whose method of implementation is known to many, but now with more than two channels.

Localisation and directional hearing

In the diagnosis of children and adults, it becomes increasingly important to obtain information about localisation abilities. AURITEC has done a lot of work on directional hearing in recent years. For children, five loudspeakers are sufficient. This only determines whether the angle has been detected or not. For this we have a quick and clear procedure, simply called “localisation”.

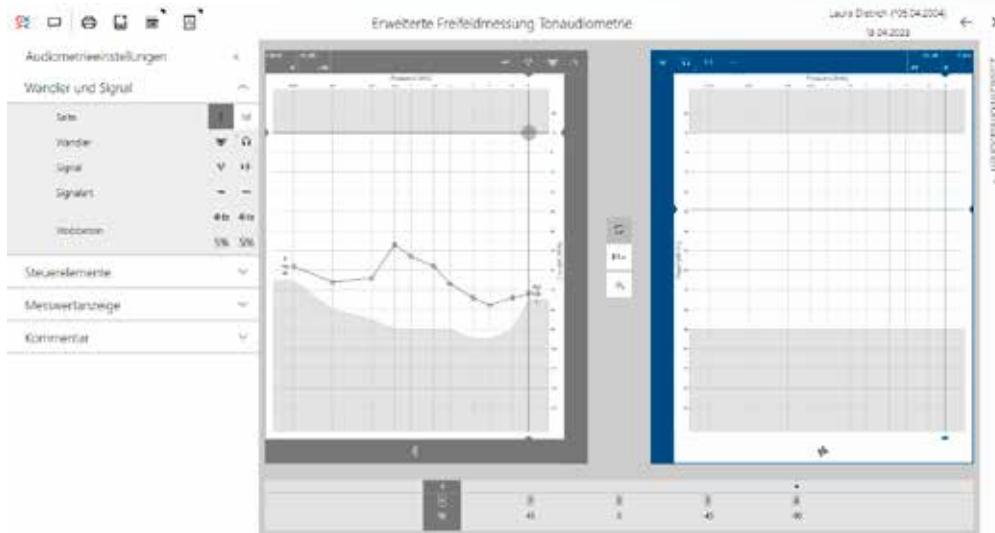
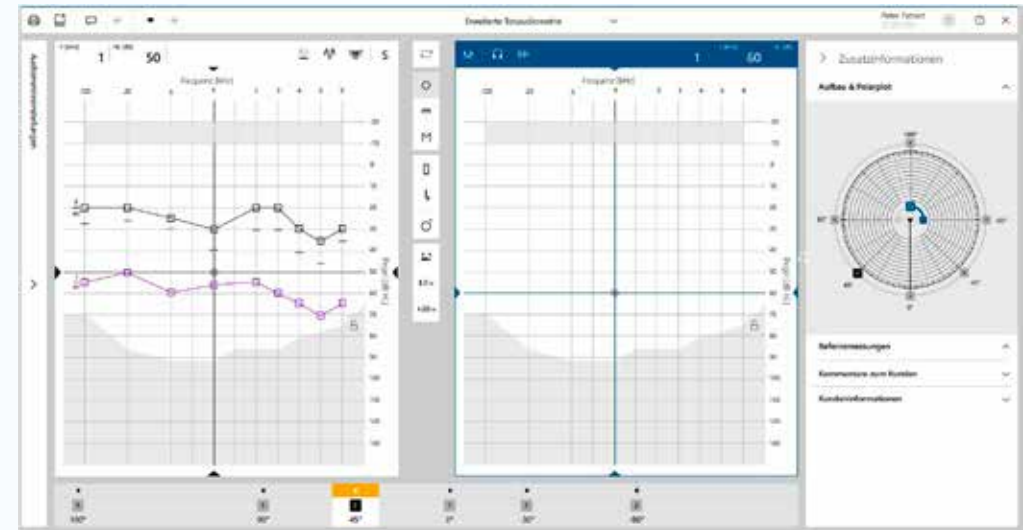


If this is not sufficient for you, we developed the “directional hearing” module in which you select loudspeakers manually. You simply enter from where the patient heard the signal. This gives you a result overview in 45° steps.

The automatic module ERKI provides you with the most accurate test for diagnosing localisation ability. Using virtual sound sources, ERKI gives important information with measurement in 5° steps when adjusting implants or diagnosing auditory processing disorder.

Extended free field measurement

Pure tones and speech signals can also be played with the regiometry. It has similarities with the freefield measurement of the AT1000, but also offers the possibility of displaying additional information, such as a polar plot with the setup of the measurement.



To simplify your workflow, you can fade in another trace, enter the word played back and open former measurements.

Paediatric audiology

Testing children accurately and well is one of the biggest challenges in audiology. In our opinion, it depends on the interaction of hardware, software, testing procedures and the users. We present accurate and easy-to-use solutions. We build our own loudspeakers (90, 100 and 110dB) because this is the only way we can meet the standard for speech audiology. With our own calibration levels for each individual loudspeaker, we include the room-specific conditions in the calibration - as the only provider.

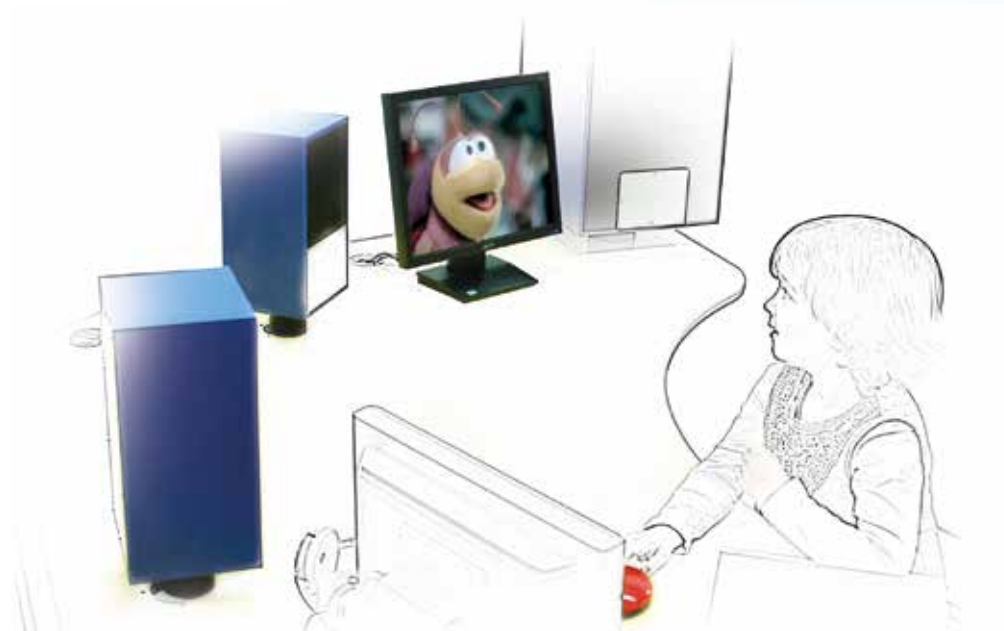


AURITEC supplies professional furniture in all shapes and colours. Based on a floor plan and with the help of pictures of your premises, we will advise you and plan your new installation together with you. Our configurator on the homepage also helps.

Paediatric audiology

The multichannel audiology in the AT2000 also helps in paediatric audiology: with the independent channels, you can perform a quick and easy check of digital audio transmission systems even without ceiling loudspeakers.

We help you to keep the attention span of babies and toddlers. Not every tool has the same effect in every situation. That's why AURITEC offers a bundle of options to choose from. Choose the ones that are most promising for you.



With the visual reinforcement software you have access to an extensive video and picture database. Animated puppets play a bigger role with younger children. The good old railway remains very popular with many customers. Pictures and lights integrated into the speakers complete the product portfolio.

The AURITEC remote control has proven itself with many users. If you hold it in your hand, you can stand next to the child and comfortably operate the audiometer while at the same time guiding or encouraging the child.



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