

Oticon ♦ Amigo



child
friendly
hearing
care



FM made friendly

oticon
PEOPLE FIRST

Amigo

Classroom FM

has never been easier

Children depend on FM at school, but using FM solutions is far from easy. Teachers can't be sure that their voice is being transmitted clearly. And they get no confirmation that the child is actually receiving the signal.

But one thing they do know is that when these systems break down – they lose valuable teaching time. So they contact you for help. Until now, FM troubleshooting has been complex and time consuming, but all of that changes with the new Oticon Amigo.

Oticon Amigo represents a new generation of solutions that rewrite the rules governing classroom FM. State-of-the-art technology makes Amigo easier to use and more reliable than any other FM system on the market. The Amigo family offers:

> > > >

- > **Certainty:**
Removes all doubt that the child can hear
- > **Durability:**
Less downtime means more teaching time
- > **Voice Priority:**
A clean and consistent speech signal
- > **Convenience:**
Programming in the palm of your hand



The Amigo educational transmitter



The Amigo multi-channel receiver





Amigo at a GLANCE

Amigo R2 RECEIVER

The Amigo multi-channel receiver is compatible with virtually all BTE hearing aids and Cochlear Implants.



LED status indicator

Europin connector

3-position mode switch

Europin rotation lock

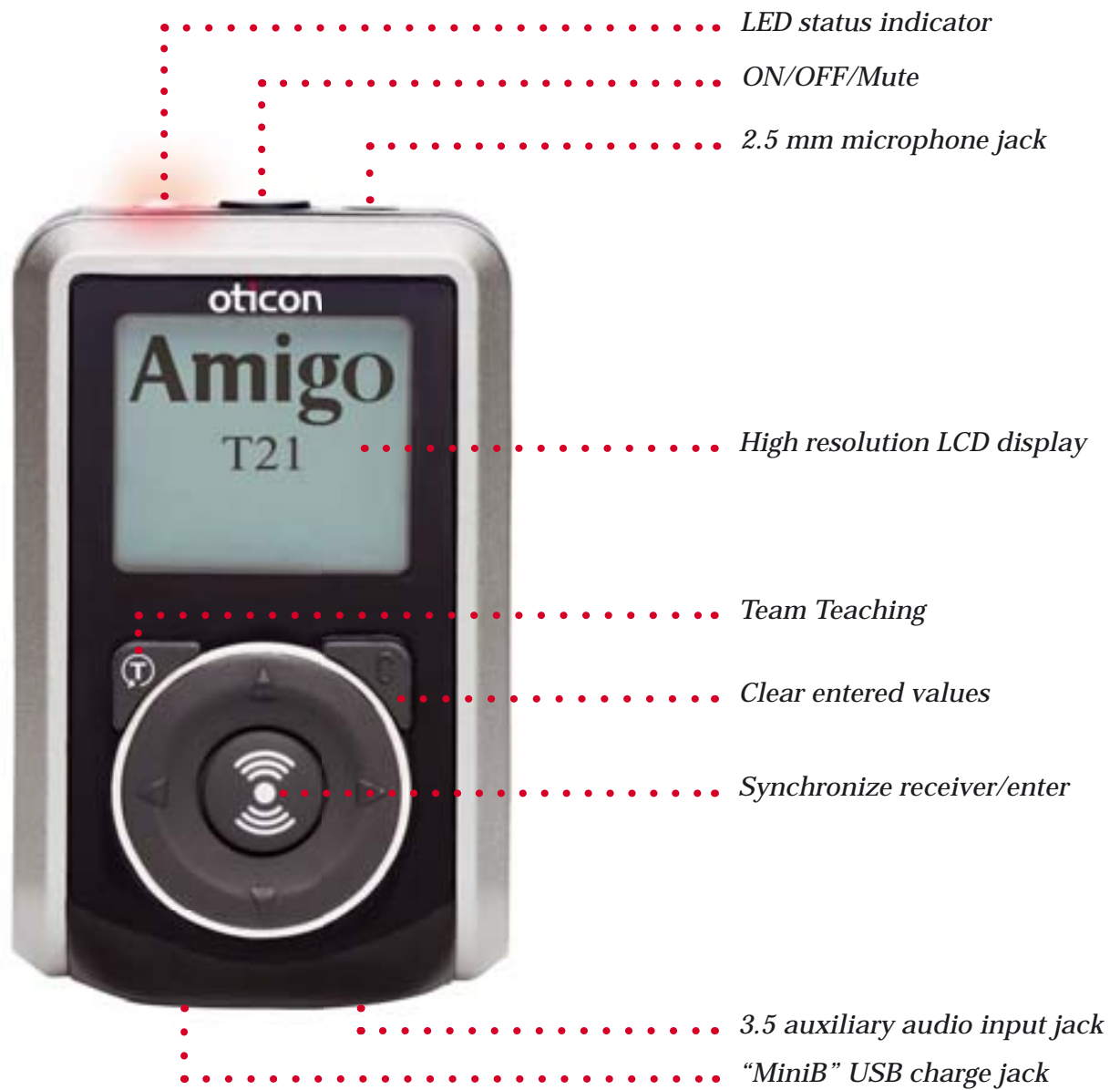
Channel seek/toggle

- > *Multi-channel capabilities*
- > *Low receiver current drain of 2.0 mA*
- > *Receiver sleep mode*

- > *Programming range ~ 30 cm.*
- > *FM transmission range ~ 30 m*
- > *SNR: 50 dB*

Amigo T21 TRANSMITTER

The Amigo educational transmitter provides an easy and friendly interface to using and fitting FM.



- > AA Standard NIMH batteries
- > Fail safe charging sensor
- > Keypad lock
- > External antenna built into mic. cord
- > Transmitter and programmer in one
- > Multi band FM capability
- > All channels available
- > FM Channel Wizard
- > Synchronization range ~ 50 cm
- > FM transmission range ~ 30 m

How do you **know** that the **child** can **hear**?

What good is FM technology if you can't be SURE that it works?

Today's FM systems have a major drawback in that they provide no confirmation that the equipment is functioning properly or that the child is hearing the signal. Young children can't be expected to give teachers on-the-spot feedback; the FM solution should do that.

And that's exactly what Amigo does with a unique, built-in Light Emitting Diode (LED) light in the receiver. When the light is on, the teacher KNOWS that the system is working and that the child can hear their voice. The LED confirms that:

- >
- >
- >
- >
- > **The hearing-aid battery is functioning**
- > **The receiver is ON**
- > **The transmitter and receiver are both working perfectly**
- > **The child is on the right channel**



Amigo provides on-the-spot feedback

Only Amigo can make you feel confident that young children are getting the input they need.





How Amigo PROVES that the child can hear

Young children typically find it difficult to provide accurate feedback on the performance of their FM system. But with Oticon Amigo, they don't have to. The receiver communicates directly with the teacher's transmitter, remembers its programmed channel settings and sends clear confirmation that the child can hear. This allows teachers to focus on teaching – and their students to focus on learning.

SEEING that the FM solution is functioning
Amigo's red LED confirms that the Amigo transmitter and receiver are working and synchronized to the same channel. And its backward or forward positioning offers visibility from any angle. The LED can be programmed to shine constantly or blink every two seconds. It can also be completely disabled - a feature ideal for older students seeking a more discreet solution.

Teachers can easily synchronize the receiver wirelessly by standing within a range of about 50 cm. The receiver acknowledges the command with three rapid blinks of the LED.

If you see the light then you know that:

- > The hearing-aid battery is functioning
- > The receiver is ON
- > The transmitter and receiver are working perfectly
- > The child is on the right channel



The Amigo LED is very flexible: it can be positioned so the light is visible from the back as well as the front.

ENSURING optimal hearing

To ensure that the child's receiver retains its channel setting, the Amigo receiver can be programmed to wake up in any channel, e.g. last channel used. This prevents accidental channel changes.

If necessary, all of the transmitter's switches can be disabled, so changing functionalities can only take place with the help of a teacher.

Downtime is wasted time

Classrooms are tough. Why can't FM solutions be tougher?

Classrooms are challenging environments. Teachers and audiologists shouldn't have to spend too much time on troubleshooting. And children shouldn't have to wait while FM systems get repaired. Teaching time is far too precious to squander on system downtime.

Such demanding school settings are no match for Amigo. From the exterior casing to the internal components, Amigo is the toughest FM solution ever made.

- >
- >
- >
- >
- > **Withstands accidental dropping**
- > **Moisture repellent**
- > **Fail-safe battery recharging**



┌ We believe in Amigo – so should you!

We know that teachers need reliable FM solutions. We believe so much in Amigo that we are ready to back every product up with an extended warranty plan.





Amigo makes DOWNTIME a thing of the PAST

Classrooms and staffrooms put special demands on FM systems. Fortunately Amigo solutions are exceptionally well protected – both internally and externally. The mechanical design

and construction; the exceptional battery consumption and the fail-safe charging system all help to make FM system downtime a thing of the past.



- 1 The microphone jack can tolerate 10,000 insertions.
- 2 The LCD shield is made of the same material as used in bullet proof glass.



- 1 Gold plated Euro-pins ensure corrosion resistant connections.
- 2 Ultrasonically welded seams cannot come apart.



- 1 The keypad switch can withstand 1,000,000 presses.
- 2 Keypad sealed with a special material for moisture resistance.

Accident PROOF

Amigo FM products can withstand accidental dropping on the floor without suffering permanent damage. The Amigo receiver has been ultrasonically welded together, creating a very robust unit that - combined with its extremely low weight - makes it highly resilient to damage.

Moisture REPELLENT

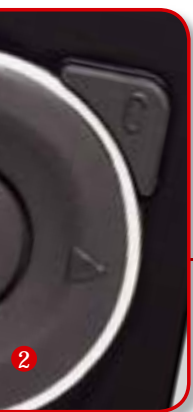
FM systems encounter all sorts of fluids - from finger paint to water and hot coffee. Therefore the buttons of the Amigo transmitter have been sealed with silicone rubber, making the unit both moisture resistant and safe to clean. The Amigo R1 receiver boasts similar moisture-resistant benefits: the shell has been welded, and the few apertures that do exist are tightly sealed.

LONG battery life

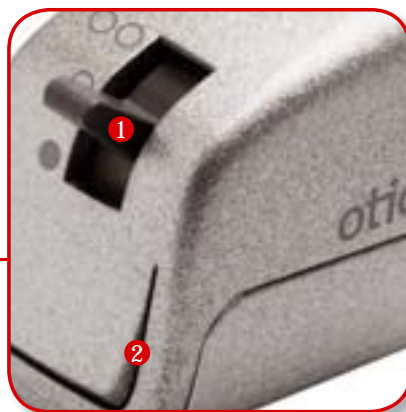
Amigo receivers have an automatic Sleep-mode function that conserves battery power. Whenever more than 60 seconds elapse between signals, the receiver shuts down all functions, with the exception of a small signal sensor. This procedure reduces battery consumption by more than 50%. The instant the FM signal returns, all systems are re-activated. And the LED light confirms this change.

FAIL-SAFE charging

The Amigo T20 and T21 use a single rechargeable AA NiMH battery that can be exchanged with a standard Alkaline battery if necessary. The battery charging censor in Amigo prevents Alkaline batteries from being accidentally re-charged. The battery lifetime of the rechargeable battery is more than 10 hours allowing the transmitter to provide constant support throughout the school day.



atches can tolerate
es.
with silicone rubber
istance.



- ① The 3-position switch can tolerate 10,000 operations.
- ② The channel switch can tolerate 50,000 presses.



- ① The rigid centre frame protects Amigo's internal components.
- ② Moulded rubber ensures a safe grip, yet absorbs impact if dropped.

Prioritizing voice over noise

Classrooms are noisy environments. Can the child ever get a clean speech signal?

A clear signal means more than just sending it from A to B; the FM solution must ensure that only the most relevant sounds are transmitted to the child.

Amigo is the first FM solution to intelligently clean up the signal and prioritize voice over noise. And it harnesses the very latest hearing aid technologies to achieve this.

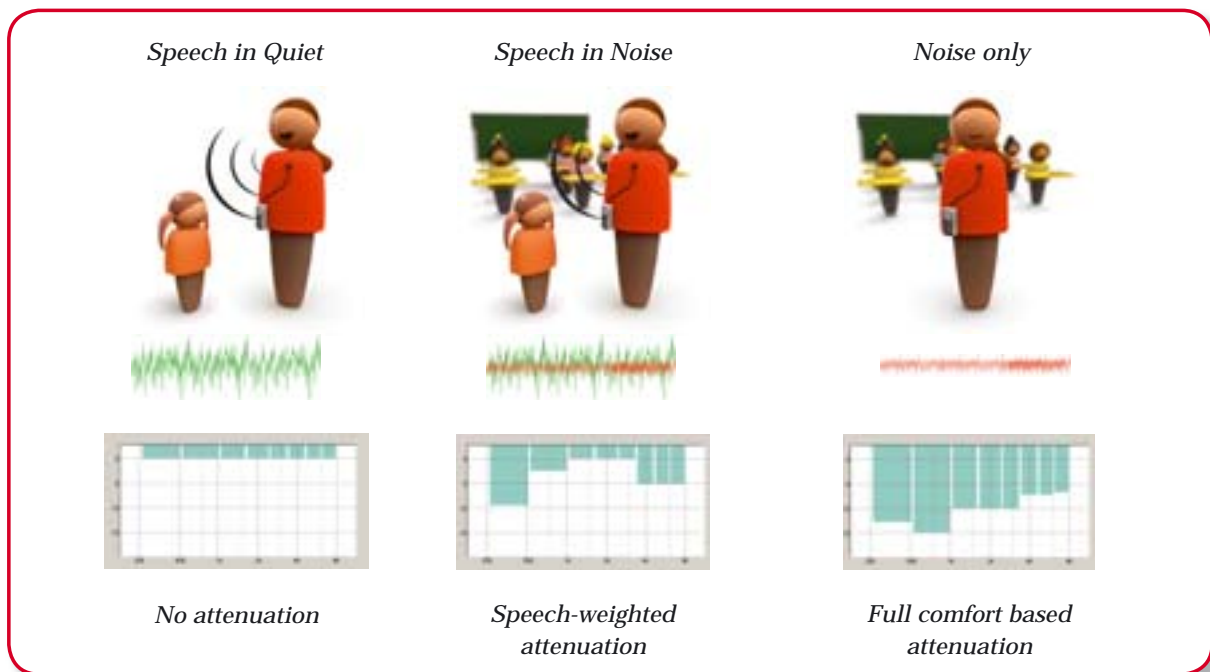
- >
- >
- >
- >
- > **Reduces noise before transmitting to the child**
- > **Balances varying voice levels**
- > **Compensates for different microphone placements.**
- > **Shifts into mute mode when no voice is present**



Reducing the need for boom microphones

Boom microphones are not always a teacher's first choice. Amigo's advanced technology ensures consistent sound quality and reduces the need to use boom microphones to improve the Signal-to-noise ratio (SNR).





How Amigo PRIORITIZES VOICE over NOISE

Utilizing technology from Oticon's most sophisticated digital hearing instruments Amigo intelligently prioritizes voices over noise. It carefully removes noise and shapes the speech signal to keep it clear and stable. With this kind of technology the child will always have access to the most important sounds.

REDUCING intrusive noise

Amigo analyzes the audio signal for the presence of speech and noise. Whenever the harmonics and modulation patterns of speech and noise appear, Amigo will immediately detect them and attenuate accordingly. This strategy preserves the integrity of the speech signal for optimum intelligibility. With Amigo, teachers won't have to compete with noisy heating or cooling systems or the sounds of traffic outside, because all of these noises will be gently reduced.



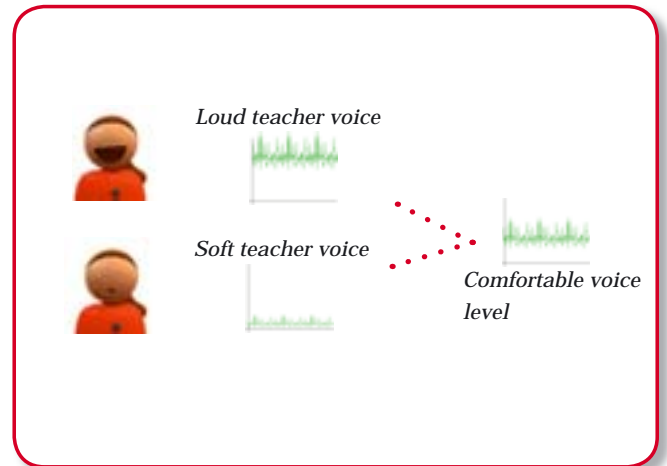
When speech is not present the transmitter mutes itself

TRANSMITTING only what matters

Amigo constantly scans for the presence of speech and if the teacher isn't speaking it automatically attenuates the microphone signal, so the child doesn't have to listen to papers shuffling or other incidental noises. This makes it easier for them to concentrate on their immediate task and participate in class.

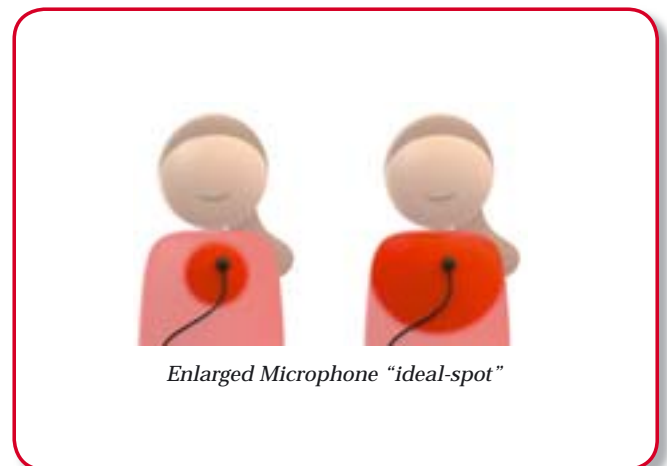
BALANCING the speech signal

Amigo monitors the output level to fit the needs of the child. Whether the teacher's voice is dynamic and booming or calm and quiet, Amigo makes adjustments to keep the signal comfortable and consistent.



COMPENSATING for microphone placement

Amigo also compensates for the varying signal levels caused by microphones placed in locations other than the 'ideal spot'. So no matter how these microphones are positioned on the teacher's upper body, the signal will remain clear.



SUPPORTING Team Teaching

The Amigo T21 makes Team Teaching easy with a simple touch of the "T" button. The signal from the T20 transmitter (worn by the supporting teacher) will then automatically be adjusted via an Automatic Gain Control (AGC) and mixed in the primary transmitter to compensate for the difference in teachers' voice levels. The Team-Teach solution offers full channel flexibility to accommodate local channel management programs.



A fitting tool in the palm of your hand

Why can't FM programming be quicker and easier?

Programming and fitting FM systems can be cumbersome and time-consuming. Cumbersome because of all the extra hardware, cables and software. And time-consuming because channel management and troubleshooting involve a lot of trial and error. This forces you to spend more time on equipment and less time on counselling.

Amigo is the only FM solution to offer full programming and diagnostics capabilities in the palm of your hand. This all-in-one solution helps you solve problems quickly.

- >
- >
- >
- >
- > **The transmitter IS the programmer**
– i.e. no other equipment needed
- > **FM channel wizard guides you in proactive channel management**
- > **Wireless programming of receiver on the ear**



No hassle. And no time consuming complications

The Amigo transmitter boasts a wealth of programming and diagnostics features. All are easily accessible through easy-to-use menus that save time in a busy daily schedule.





Why Amigo is EASY to FIT and PROGRAM

Amigo FM solutions are pre-programmed to suit the needs of the vast majority of users. But if you should need to customize the receiver and transmitter, you'll find the process easy. No extra equipment is required because all programming and troubleshooting can be performed via the Amigo FM transmitter itself.

GET IT RIGHT the first time

Channel management doesn't have to be complicated: Amigo's channels are all pre-programmed and the built-in FM Channel Wizard makes channel-management and diagnostics extremely easy.

The Channel Wizard helps you in three different ways:

- > **Scan & Select Primary Channel**
The transmitter will scan the environment for interference and offer a list of interference-free channels.
- > **Scan & Select Team Teaching Channels**
The transmitter will scan the environment for interference and suggest primary and secondary team teaching channels.
- > **Monitor Single Channel**
With the earphones plugged into the transmitter you can monitor the signal quality on a specific channel.

Program TRANSMITTER - Directly

In programming mode the transmitter provides a complete FM toolkit for the professional. Fitting is done wirelessly – i.e. no cables or other equipment are needed. It allows you to enter school and classroom information and customize the transmitter to the individual who will be using it. You can also disable more complex functions like Team Teaching, individual FM channels and advanced digital audio processing.

Fitting RECEIVERS – Live

Fitting receivers can be performed live on the child's ear at school, or inside a test box at your clinic. This eliminates today's tedious trial-and-error process of receiver fitting. All Amigo functionalities can be customized to suit different age groups:

- > Small children will need a high level of tamper resistance and system transparency.
- > Young children will most often use the default setting (based on the ASHAA* standard of +10 dB FM gain).
- > Older children will want to handle the various functions themselves.



Full compatibility

CI: Amigo receivers are compatible with CI processors

BTE: Amigo receivers are compatible with all BTEs

FM: The Amigo FM solution is compatible with FM systems

* American Speech-Language-Hearing Association

Amigo

Inside and outside the classroom

Shouldn't children benefit from multi-channel FM outside the classroom?

FM systems improve communication in the classroom, but they can also be useful elsewhere. Wherever noise presents a problem, children can overcome it with a portable FM solution.

The new Amigo T10 transmitter and Amigo R2 receiver offer both portability and flexibility: the transmitter can be held in the hand, worn around the neck or even placed on a table. It can also be used in classrooms at home or during social activities. With superior directionality and multi-channel capabilities the T10 and R2 promise a clearer sound signal in any kind of environment.

> > > >

- > **Superior directionality for a better Signal-to-Noise Ratio**
- > **Multi-channel capabilities**
- > **No programming required – just charge it and go!**



Amigo benefits outside the school

The Amigo T10 transmitter and R2 receiver also offer full multi-channel FM benefits in most everyday situations outside the classroom.





How Amigo helps INSIDE & OUTSIDE the classroom

FM systems are invaluable in the classroom but children can also benefit from them at home. The new portable Amigo T10 transmitter is an enhanced version of the sleek, super-stylish Lexis transmitter. When used in conjunction with the Amigo R2 receiver the T10 offers multi-channel capabilities, outstanding directionality, more natural sound quality and longer battery life.

Multi-channel INTELLIGENCE

The R2 receiver has a manual Channel Seek button which allows the older child to toggle through a list of FM channels. These are either pre-programmed or adapted to the individual. Children can also use this button to automatically search through the channel list until they locate an active FM signal.

Great SOUND quality

The Amigo T10 uses four microphones and advanced digital signal processing to create a broad, flat, frequency response – an approach that raises the sound quality to a much higher level.



Higher DIRECTIONALITY

With the T10, the articulation-directionality index (AI-DI) is up to 40% higher than other fixed directional FM systems. This allows children to focus on what they want to hear simply by pointing the transmitter in the right direction. The multi purpose transmitter can also be placed on a table or worn around the neck in various operational modes.

Cool DESIGN

The futuristic, ergonomic design of the Amigo T10 helps to reduce the stigma so often associated with hearing solutions. Design-wise, the T10 is in the same class as other popular consumer gadgets such as mobile phones and MP3 players. The cool design helps to motivate children to use the device – even when not observed by parents and teachers.



Placed on a table in omni mode, the T10 picks up the voices of the child's companions.



The T10 can be worn lavalier style in Focus mode, e.g. in a noisy car.



The T10 quickly and easily connects to external audio sources such as a TV, PC or MP3 player.

Making it **easier** to **help children** achieve their full potential

Children deserve every opportunity to explore the world, perfect their skills and achieve their full potential. Helping them in the pursuit of these goals are devoted parents, audiologists and teachers. And these dedicated caregivers merit all the support they can get.

An attentive partner

Oticon makes a contribution by developing genuinely child-friendly hearing solutions. The needs of the child and family drives our innovation. And even though our solutions are as sophisticated as can be, they are also practical and exceptionally easy to use.

Technology is only a part of the solution where children are concerned. We aim to give people the support tools they need to ensure that the formative years of the children in their care are as fruitful and as rewarding as possible.

That's what "**child friendly hearing care**" is all about!



Visit www.oticon.com

At www.oticon.com visitors can explore topics related to the world of FM.





Meet the Amigo Family

Oticon Amigo T20

The Amigo T20 is a body-worn transmitter for use in classrooms. The transmitter also serves as a programming and fitting unit through a special menu.



Oticon Amigo T21

The Amigo T21 transmitter offers the same functions as the Amigo T20 with the addition of a built-in team teaching function.



Oticon Amigo R1

The Amigo R1 is a standard multi-channel receiver that can be used with most BTE's and CI's from any manufacturer via its universal Euro connector.



Oticon Amigo R2

The Amigo R2 offers all the functionalities of the R1, plus a manual Channel Seek functionality.



Oticon Amigo R7

The Amigo R7 is a dedicated receiver for the SUMO hearing aid family. The receiver offers the same functionality as the R2.



Oticon Amigo T10

The Amigo T10 transmitter is a multi-purpose transmitter designed to be used inside and outside the classroom.



Oticon Amigo WRP

The Amigo Wireless Receiver Programmer (WRP) allows wireless fitting of all Amigo receivers. Additionally it offers FM channel wizard functionality for pro-active channel management.



Amigo microphone options

Amigo comes with a high quality omni-lapel microphone. In addition, three types of optional microphones are available - all with a built-in external antenna in the microphone cord:

- Lavalier microphone
- Directional lapel microphone
- Boom microphone



Oticon Amigo FM-CI

The Amigo FM-CI adaptor offers full compatibility with body-worn CI processors.



People first



We believe that it takes more than technology and audiology to create the best hearing instruments. That's why we put the individual needs and wishes of people with hearing loss first in our development of new hearing care solutions.