junior

# Dynamic FM

The new FM standard for schools

**PHPNAK** life is on

### What the experts say...

"Hearing in noise is one of the biggest challenges for children, and the improvement in speech recognition in noise provided by Dynamic FM is unparalleled by any other advanced noise-management technology."

#### Jace Wolfe, PhD

Director of Audiology, Hearts for Hearing, and Adjunct Professor at the University of Oklahoma Health Sciences Center



"I evaluated Dynamic FM extensively with a group of children and adults with previous FM experience. Objective tests showed that the Adaptive FM Advantage (AFMA) in Dynamic FM resulted in significant improvements for the majority of participants in most of the speech recognition in noise conditions. Comments from the participants regarding the AFMA processing were that it generally sounded clearer, louder, and easier to understand. For the classroom activities, 100% of the participants chose Dynamic FM over traditional FM. These results suggest that in noisy environments, Dynamic FM is clearly better than traditional FM."

Linda Thibodeau, PhD. Professor Head, AUD Program Advanced Hearing Research Center University of Texas at Dallas

## **Introducing Dynamic FM**

In recent years hundreds of thousands of school children and college students have used Phonak FM (wireless) systems to better hear and understand their teachers.

With the arrival of Phonak's groundbreaking new Dynamic FM platform, Phonak's family of FM products has received a serious performance boost, ensuring that students with hearing loss and concentration issues are even less likely to feel disconnected from learning.

Dynamic FM is far from a mere product upgrade; it is a completely new FM technology. Based on a new processing chip and employing new algorithms, software and mechanics, Dynamic FM is an intelligent wireless communication standard that offers its users crystal clear audio, a plethora of new, usable features, simple set-up and configuration, and full device reporting.

In short, Dynamic FM allows Phonak to bring to market the kind of transmitters, receivers and accessories that education professionals and school audiologists have often longed for.

The Dynamic FM platform offers the following seven industry-leading features:



#### Dynamic Speech Extractor

A full suite of features that boosts the sound quality of Dynamic FM way beyond that of traditional FM systems.

The concept that best positions Speech Extractor above the competition is 'Adaptive FM Advantage' (AFMA), a new algorithm that automatically adjusts the output of the listening FM receiver or receivers to ambient noise. This marks the hearing industry's biggest ever single improvement in that all-important signal-to-noise ratio. According to independent research, AFMA is so effective that speech test scores in noisy environments often improve by percentage points well into the double figures.





#### AutoConnect

AutoConnect eliminates troublesome programming and verifying procedures.

A family of functions and features designed to simplify the lives of those who set-up FM systems, AutoConnect eliminates hassle by accurately and automatically setting many of the parameters required to match the performance of Dynamic FM receivers with hearing instruments. For example, AutoConnect allows users to choose their preferred FM output level and corrects hearing instruments' different audio input impedances.

#### MultiTalker Network

This feature expands the functionality of **inspiro** and DynaMic transmitters (*shown below*), from being single talker devices to one of several transmitters used together in a classroom. This approach allows two or more speakers in a class to transmit their speech to receiver-wearing children whenever they choose to speak and without having to change transmitter settings in any way.



#### DataLogging FM

Previously only offered with hearing instruments, DataLogging FM saves FM transmitter usage data for future analysis by school audiologists. Dynamic FM brings this feature to the FM arena for the very first time.

DataLogging FM stores information such as the length of time a transmitter is worn, its audio input usage, details of receiver monitoring operations and more. This data can then be saved and read on PC using **inspiro**'s free-to-download FM SuccessWare, giving audiologists clear, comprehensive insights into how an FM system has been used and in turn allowing these professionals to offer teachers useful advice and recommendations.

#### SoundCheck

The first feature of its kind to appear in any FM system, SoundCheck simultaneously measures speech and background noise levels, with these results then shown in an easy-to-understand format on the **inspiro**'s display.

SoundCheck's teacher benefits are two-fold: the function acts as a background noise indicator, plus it helps the teacher place the transmitter's iLapel or iBoom microphone in the optimal physical position – helping the teacher to deliver his or her message effectively, even in noisy conditions.

#### Monitoring

Monitoring provides teachers, school audiologists, speech therapists and parents with a reliable system check, enabling them to feel sure a Dynamic FM system is working faultlessly, without their requiring extensive technical know-how.

Monitoring gives supervisors immediate feedback about a hearing instrument's battery status, its audio shoe connection quality, channel information and much more. Monitoring is particularly useful if children are being uncooperative or are too young to comment on how an FM system is performing.

#### ChannelFinder

Professionals working in schools with several FM systems are only too well aware of the setup challenges faced when trying to run these systems without interference or reception problems. ChannelFinder makes such niggles a thing of the past.

Designed to detect interference-free channels and provide ultra-clear reception when several FM transmitters are present, ChannelFinder makes the process of sychronizing a student's receiver to a new frequency quick and easy.



## The Dynamic FM product family

#### Transmitters



#### inspiro

**inspiro** is a new Dynamic FM transmitter that is ideally suited to the needs of both regular and special school teachers.

**inspiro's** award-winning design, comfortable form factor and easy-to-read color display make using this transmitter a cinch, plus it features soft keys, an alarm clock and many more features designed to help teachers enjoy the performance benefits of Dynamic FM without technical know-how. **inspiro** is fully backward compatible with traditional Dynamic FM receivers.



#### DynaMic

Designed to enable receiver wearers to enjoy any classroom discussion, DynaMic is a durable handheld microphone that incorporates Dynamic FM transmitter technology. It is supplied with a sturdy desk stand and has been designed exclusively for MultiTalker Network use with **inspiro**.



Phonak's new trio of point-and-listen speech transmitters offer the sound and performance benefits of Dynamic FM while also giving the listener full control of what and how they hear. Each transmitter features a built-in microphone array and simple, intuitive interface. The family begins with the EasyLink+, a one-button transmitter capable of accurately detecting sound via whichever operating mode its fitter chooses.

The ZoomLink+ offers the end user three microphone modes: *Omni*, which picks up sound from all directions. *Zoom*, which is the universal mode and *SuperZoom*, a sharp adaptive beam mode with noise cancellation.

The SmartLink+ takes Dynamic FM performance, the three listening modes above, and adds hearing instrument remote control functionality and a Bluetooth link for convenient, hands-free cellphone and MP3 player use.

SmartLink+, ZoomLink+ and EasyLink+ are especially suitable for teenagers and adults.

#### Receivers



#### MLxi

A standard universal Dynamic FM receiver, compatible with virtually all hearing instruments brands and models. Just plug in and listen!

#### ML10i

MI 9i

The ML10i is a miniature, design-integrated Dynamic FM receiver offered specifically for the Naída UltraPower hearing instruments.





ML11i

The ML12i is a miniature, design-integrated Dynamic FM receiver for use with those Phonak micro Behind-the-Ear (BTE) hearing instruments that use a 13 battery.



The ML9i is a miniature, design-integrated Dynamic FM receiver suitable for use with Phonak's Exélia Art, Exélia, Versáta, Certéna, Savia Art, Savia, Eleva, eXtra and Una hearing instruments.



The ML11i is a miniature, design-integrated Dynamic FM receiver offered specifically for the Naída SuperPower hearing instruments.



Offers the same 'plug and listen' functionality as the MLxi but also incorporates a small connector for Cochlear's Intenso, Divino and Compact Baha instruments.

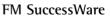


#### iSense

iSense is Phonak's new family of miniaturized wireless products for children and adults who do not use traditional hearing instruments but who can easily benefit from an improved listening link.

These users include those individuals who suffer from central auditory processing disorder (APD), slight hearing loss, unilateral hearing loss, autism, attention deficit (hyperactivity) disorder (ADHD) and also second language learners.

The iSense family currently features two receivers: the iSense Micro (*above left*) and iSense Classic. iSense Micro is a tiny Dynamic FM hearing receiver with a trendy Bluetooth-style looks. The iSense Classic is a mini-style wireless listening system offering various wearing options: MP3-player style, lavalier (cord-hung) style or in-the-pocket.





#### FM SuccessWare

FM SuccessWare is Phonak's proprietary FM software package. Designed for use with Phonak's FM transmitters and receivers, this software is PC-compatible and offers frequency management, the fine-tuning of FM products, equipment management and reporting. It also includes a DataLogging FM analyzer. FM SuccessWare is free and automatically updated via the internet.

#### Accessories



#### iLapel

A lapel-worn microphone featuring directional multi-microphone technology. Specially developed to complement **inspiro's** advanced audiological features, iLapel is a universal microphone for everybody.



#### WallPilot

This picture frame style device performs Automatic Frequency Synchronization (AFS) to ensure that the FM receivers of students entering the room are automatically set to the correct frequency. WallPilot is compatible with all Phonak's multi-frequency and Dynamic FM receivers.



#### iBoom

An ultra-light and comfortable personal boom microphone. iBoom can be worn on either ear and adjusts easily to fit all ear and head sizes.

### **More FM Resources**

#### FM Overview

Get to grips with FM technology with this easy to follow starter guide.

#### http://www.hearingseminars.com/introductiontofm/

#### An introduction to iSense

Learn more about these new Dynamic FM devices for children and adults who do not have a normal hearing loss.

#### www.iSense.Phonak.com

#### FM Compatibility Guide

Use this page to check whether your hearing instrument or cochlear implant is FM compatible.

#### www.phonak.com/mlx

#### eSchoolDesk

eSchoolDesk is an FM support tool aimed at teachers and hearing professionals. eSchoolDesk includes a clearcut explanation of FM technology and its benefits, along with how-to movie clips, a product configurator and further reading links.

#### FM eLibrary

An extensive and searchable collection of FM articles and reports from publications around the world. Simply choose a keyword to hunt out articles of interest. All reports are in Adobe PDF format.

#### www.FMeLibrary.com

#### Further product information

This publication is an overview of our Dynamic FM products for schools. The following additional brochures are also available on request:

- "Dynamic FM for adults and teenagers"
- "A Phonak is for everyone" Junior Hearing Solutions
- "A Phonak is for everyone" Hearing Solutions Spring/Summer 2009

To order these brochures please contact your local Phonak representative.

#### www.eSchoolDesk.com

### Life is on

We are sensitive to the needs of everyone who depends on our knowledge, ideas and care. And by creatively challenging the limits of technology, we develop innovations that help people hear, understand and experience more of life's rich soundscapes.

Interact freely. Communicate with confidence. Live without limit. Life is on.