

# Vocalight\* Infrared Sound

*The Vocalight\* Infrared Sound Field System is a specialised PA system for the classroom or meeting room. A number of speakers are placed around the room and when the teacher speaks into the microphone, his/her voice is sent via infra-red signals to a receiver which amplifies his/her voice. This wireless PA system is designed for use in both general and special educational classrooms to improve classroom or meeting room acoustics.*

## FEATURES

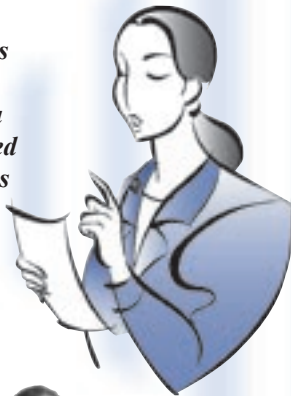
- Uses infrared technology to transmit the teacher's/speaker's voice.
- Unlimited number of Vocalight\* systems can be installed.
- Input power - 30VA
- Output power - 4 watts/channel
- Easy to operate and recharge
- Clear amplified sound
- Two channels
- Typical range is 12.5m

## BENEFITS OF THE VOCALIGHT\*:

- All students can hear the teacher from anywhere in the classroom as clearly as if the teacher were only a few feet away.
- Focus is on the speaker and not the background noise or echo.
- Up to 30% improved speech recognition.
- Reduced fatigue for students and teachers.
- Increases test scores and class participation.
- Improved attention and behavior.
- Decreases behavioral referrals and teacher vocal fatigue.
- Provides clarity of sound to all students and participants
- Reduces vocal fatigue for teachers and speakers.

## HOW DOES IT WORK?

*The teacher wears a small wireless transmitter with a microphone placed within 11cm of his or her mouth.*



OR



*The voice signal is transmitted across the room through infrared light, bypassing the effects of distance, noise, and reverberation.*



*The teacher's voice signal is then brought close to students' ears through speakers placed around the room.*



\* Trademark of Phonic Ear Inc. USA.

A division of All Mod Comms Pty Ltd

ACN 002 863 103

# PRINTACALL



2 DOIG AVE., DENISTONE EAST, NSW 2112

email: [sales@printacall.com.au](mailto:sales@printacall.com.au)

web: [www.printacall.com.au](http://www.printacall.com.au)

TEL : (02) 9809 2392

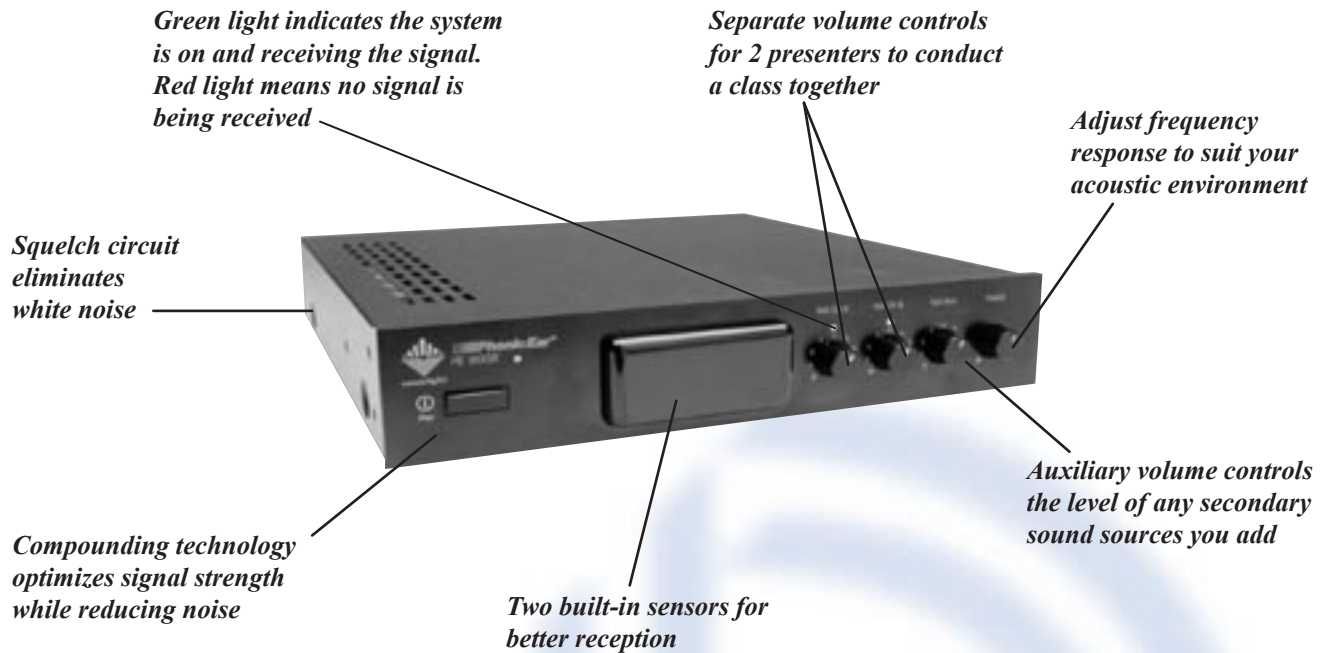
FAX : (02) 9809 2345

TTY : (02) 9809 1283

**COMMUNICATIONS TECHNOLOGY FOR DEAF, HEARING IMPAIRED AND SPEECH IMPAIRED PEOPLE.**

# Vocalight\* Infrared Sound Field consists of:

## Vocalight\* Base station receiver: PE 900R



## Body-worn Transmitter: PE 900T and microphone



## Speaker Configuration of your choice:

*Attach speakers to the wall with brackets, or use floor stands or tabletop stands for easy movement around the room*

*Optional ceiling speakers available*

*Full range, bookshelf-style speaker provides realistic reproduction of all types of audio*



*Special wall mounted sensors receive the sound signal*

*We recommend a permanent wall bracket installation*

## Option: Handheld microphone

*Handheld microphone is sturdy and easy to use - ideal for passing around to students for reading aloud, reports, even team teaching*

*Hidden channel selector prevents students from accidentally changing channels while passing the mic around*

*Emitting diodes*



*anti-rolling guard band*

*Emitting diodes*

*on/off switch*

## Factors which play a part in hindering the development of children's auditory processes:

- **Distance:** As distance from the teacher's voice increases, the ability to understand speech decreases. Students who sit in the back-rows of a classroom and even those in the middle rows may be missing a great deal of what the teacher is saying. Rather than focusing on learning, they may be straining to hear.
- **Noise:** Background noise plays a major part in miscommunication and lack of understanding in the classroom. It is difficult for the teacher to be heard over noises such as children playing in the playground, squeaking chairs, chatting students, heaters and fans.
- **Echo:** Hard walls, high ceilings, glass windows, and uncarpeted floors all reflect many sounds which can lead to speech misunderstanding.

*There is no doubt that acoustics is very important in the classroom with children spending as much as 45% of the school day in a listening situation.*

# Teaching a class of younger children in a room with poor acoustics is akin to “turning out the lights”.

*The louder the classroom sound, the louder the teacher must speak, and the louder the students will speak to one another. The problem becomes compounded for children with at-risk characteristics as they have more difficulty understanding and concentrating on what the teacher is saying.*

## WHY IS IT SO DIFFICULT?

If you've ever taken a foreign language class or tried to converse at a loud party, you know how exhausting it can be trying to understand someone under adverse conditions. For some children, however these conditions are more than a momentary challenge.

Children with Central Auditory Processing Disorder (CAPD) have difficulty processing and separating language from environmental noise even though their hearing may be fine.

For those with Attention Deficit/Hyperactivity Disorder (ADHD), a loud or poor acoustic environment allows for too many distractions, making it extremely difficult for them to focus on the teacher.

### Reader please note:

This brochure is an abstract of and developed from a Phonic Ear Inc, USA brochure entitled “All about Sound Field, the listening learning link” 828-6880-109/REVA/1918 102 provided to All Mod Comms PTY LTD, Printacall by Phonic Ear Inc, USA.

- Soundfield systems are not a substitute for a personal FM system for children with a moderate to profound hearing loss.
- May not be of adequate benefit in excessively noisy or reverberant learning environments. In these environments, room acoustics should be improved before installation of a sound field system.

## THE COMMUNICATION CONNECTION

What do many of these children have in common? Quite often, children with at-risk characteristics have a more difficult time than most understanding and focusing on what the teacher is saying.

Good speech intelligibility is crucial for the development of auditory and language skills in all children. Many remain silent about the difficulty they are having discerning speech in the classroom. Children may become confused, or worse - give up. Unfortunately, until the teacher or a family member begins to take notice of the real problem, students may be perceived as apathetic or incapable of learning the material.

