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Personal Communication Devices

PCD PURCHASES: Evaluate your needs and seek the guidance of your audiologist before buying new communication technology.

A personal communication device (PCD) is any instrument used to help the exchange of information between two or more people. PCDs include devices like computers, cell phones, text telephones and telecommunication devices for the deaf (TTY/TDD), two-way radios, pagers, personal e-mail devices, and other wired or wireless systems.

For anyone, the ability to exchange ideas and feelings with individuals or groups is a critical life skill. But for people with hearing loss, conducting everyday communication about personal, business and health/safety/welfare matters can be a formidable challenge. Therefore, one of the most important uses of PCDs is to improve communication exchanges between all people, from those with normal hearing to those with compromised or no hearing at all.

Communications technology continues to evolve and advance. One rapidly expanding and highly interesting PCD is the mobile cellular telephone (cell phone), which is used for a number of rapidly expanding applications in addition to the original use of making and receiving phone calls. Modern cell phones offer the ability to monitor things like healthcare, news, sports, and the stock market. Some offer "context aware" applications, meaning the phone can sense where it is and how it is being used and then adapt its behavior. Collaborative computing offers enhanced abilities to exchange electronic information. Other cell phones can offer integrated maps, navigation assistance or remote tracking of people, vehicles or marine vessels via links to a global positioning system (GPS) or global system for mobile communication (GSM) device.

Many new cell phone systems use "middleware"—a general term for any programming that serves to "glue together" or enhance two separate and usually already existing programs. One example of a middleware application is being used in mobile systems like Verizon's VZ/GPS Navigator to provide directional communication. This system combines cell-tower triangulation with GPS positioning to offer enhanced services for mapping, locating, tracking, and direction-finding. By combining the two technologies, it is possible to offer directional services even in places like parking garages, where using a GPS alone would not allow these services to operate.

Even with modern advances, current cell phone technology has yet to be fully explored. Cell phones have promise, but complex middleware and the use of middleware technology need to be more effective to fully captivate this potentially vast resource for enhanced personal communication. Upcoming conferences in 2008 are designed to pull ingenious and talented people together to collaborate more fully by developing middleware ideas and resources toward more effective personal communication devices.[1]

Despite the cell phone communication technology explosion, there are new restrictions on when and where it may be used. For example, as of July 1, 2008, California united with Connecticut, the District of Columbia, New Jersey, New York, and some local jurisdictions in prohibiting handheld mobile phone use while driving. The California Wireless Telephone Automobile Safety Act prohibits cell phone use in moving vehicles, unless the driver is using a hands-free device. Additionally, drivers under the age of 18 are prohibited from using cell phones when operating a motor vehicle, even if equipped with a hands-free device.[2]

These kinds of laws show that even though cell phones offer expanding technological advances, excitement in purchasing them needs to be tempered with caution. They may, at times, be more of a distraction than a helpful solution. Therefore, as you begin to purchase new personal communication systems, evaluate your communication needs and seek the help of an audiologist to choose the best solution to your personal communication problems.

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