

The Versatility Of The MP3 Player

The latest entry in the world of modern music is the MP3 player. Today it is the darling of the consumers. None of the previous generation could offer so many facilities - recording, 8-track-tapes, cassette-tapes as well as CD`s. It truly is a magical miracle. It can be carried in the palm and slipped into the pocket and yet it is powerful enough to create individualized music lists and carry along thousands of songs and music. All this information and facility is sometimes packed into a MP3 player that may weigh less than an ounce.

This portability gives it the edge over other players as also its storage facility. Some models of MP3 player have added ons like viewing of video and photo, alarm systems and calendar, cell phone and Internet functions.

The revolution of MP3 started in the late 90`s with the introduction of file-swapping and portability being high on the agenda. MPEG or Moving Picture Experts Group developed the compression system for storing video data. The MP3 reduces bytes in a song without losing the high quality effect of a CD. With this new device songs can be downloaded faster from the Internet. For example a four-minute song uses 40 megabytes to be downloaded but with a MP3 only 4 megabytes are required.

MP3 is the usual file format in use but others can also be played in MP3 players - WMA,MIDI, WAV, AAC, ADPCEM, VQF, ASF, ATRAC and Ogg Vorbis.

The previous generation of music players necessitated moving parts to read data on a tape or CD. But with MP3 players solid-state memory is used. It is a device that stores data with software imbedded in it that allows for application - that is transferring MP3 files to the player. Music can also be copied from the radio, CD`s radio and Internet. The list is termed playlist.

Many technologies have converged in this marvel called MP3 player. By itself not one of its components is new or revolutionary but by blending the previous ones an unparalleled and unique device has been manufactured. The basic parts of a MP3 consist of data-port, memory, micro and digital signal processor, display, playback facilities, audio port, power supply and amplifier.

The memory types are internal flash-memory, compact-flash-cards, smart-media-cards, memory-stick and internal-micro-drive. All are solid-state memory with the exception of internal-micro-drive. Without moving parts the advantage is more reliability. Moreover music does not skip. The MP3 contains minuscule hard-disk drives having the capacity to store 150 times more than flash-memory technology.

The brain of the player is the micro-processor. Through playback controls it monitors the input and shows information about the current song while sending relevant directions to the DSP chip.

Apart from storing music MP3 player plays music by drawing out the songs from memory and allows for amplification to enable the user to hear. All of the MP3 portable players are operated by battery. Mostly these are internal lithium type and have a lifespan ranging from 10 to 28 hours from one charge. AC adapters are also provided so that it can be used consuming ordinary electricity. DC adapters can be used while driving in a car.

There are as many types of MP3 players as there are consumers who purchase them. The choice depends on type of use, amount of storage required and how much the pocket will permit. Flash memory players are the tiniest and lightest. Hard drive and mini-hard drive players are bigger and heavier. Then there are MP3 CD players, mini players and also hybrid players sporting innumerable added ons that one has to see to believe.

About the Author

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Roberto Sedycias works as IT consultant for www.PoloMercantil.com.br