

Choosing a Portable MP3 Player: Part 2

This series of Tech Tips is geared towards simplifying MP3 players for the casual consumer by addressing eight key topics. In the first part of this series, we looked at storage technologies, capacities, file formats, and displays, and in this part, we will wrap things up by looking at batteries, extra capabilities, computer interfaces and size.

Batteries

Battery type and expected life are key features when considering any type of portable electronics device, and MP3 players are no different. Many devices now come with rechargeable batteries included, and the more convenient arrangements allow for the batteries to charge while still in the unit, eliminating the hassle of having to remove them to be placed in a stand-alone charger. Even more convenient are devices that recharge via USB, so all you need to connect is one cable that serves both to transfer files, as well as to transfer power from the computer to the device.

Many devices do not come with rechargeable batteries, but it is always an option to consider since most support a standard format, such as AA or AAA. A charger and a set of batteries (<http://www.geeks.com/details.asp?invtid=V-1000>) can be picked up relatively inexpensively, and over the course of the devices life the savings will add up when compared to the number of disposable batteries that would be used.

Speaking of the number of disposable batteries that will be used, the life expectancy on one charge (or one set of batteries) is of great interest, but generally harder to gauge from the manufacturer's information. Many devices do not publish a life expectancy, and those that do may need to be taken with a grain of salt. The conditions may vary from the manufacturer's test to the real world, so it is always a good idea to find an independent review of the device to see how it fared.

Some devices with a single AAA battery may run for up to 30 hours on one charge, while a device using two AA batteries may only make it to 10 hours.

The iPod includes a rechargeable battery that provides a good amount of run time on each charge, but unlike the ones discussed so far, it is not readily available as an aftermarket replacement. If the battery dies, the unit needs to be shipped back to Apple for replacement, which proved to be quite unpopular with owners of previous generations of the device, as it seemed to be one of the device's few flaws. That issue has been addressed, but the battery in the new generation iPod is still proprietary, and can not be replaced by the end user.

Extra Capabilities

Many MP3 players offer greater value and convenience to users by doing much more than just playing MP3s. Some devices, such as the MSI MegaPlayer 515 (<http://www.geeks.com/details.asp?invtid=5515-040&cat=MP3>), include FM radio tuners and voice recorders for greater appeal. There are numerous other

handy features found on some devices that some people may find useful. Some will double as portable storage for any file type, some include basic e-mail clients, while devices with expansion slots can be used as a card reader when attached to a computer.

Some devices are more appropriately called portable media centers, as they offer far more than just digital audio playback. Although a device such as the Creative Zen Portable Media Center (<http://www.geeks.com/details.asp?invtid=70PF095000000-DT&cat=MP3>) does play MP3 files, it also can play videos and show still pictures on its 3.8" color screen. Sony's new PSP (<http://www.us.playstation.com/psp.aspx>) is an exciting new portable device that takes things even farther by adding video games to the list (while still offering digital audio playback).

Computer Interfaces

The means for getting the files from the computer onto the MP3 player deserves consideration in respect to the protocol used, as well as the connection provided. Most devices utilize USB for file transfers, but Firewire is also an option, and this 40GB Apple iPod (<http://www.geeks.com/details.asp?invtid=PE436A-NB&cat=MP3>) actually supports both protocols.

When selecting a device that utilizes USB, be sure to note whether it supports USB 2.0, or the much slower USB 1.1 standard, as units are still available using this older format. If you anticipate rotating your files regularly, or have a large capacity player to fill, the speed of a USB 1.1 device may frustrate you. USB 2.0 offers transfer rates up to 40 times faster than USB 1.1 (480 Mb/s versus 12 Mb/s), so keep that in mind when preparing to move a few thousand files!

In addition to the protocol used, the physical connection may be worth paying attention to. Many devices, such as this Perception Digital player (<http://www.geeks.com/details.asp?invtid=PD099-256FM&cat=MP3>), offer a mini connection on the body for connecting a somewhat special USB cable for data transfer. If you want to add files to the device, you need to carry the cable with you, or take a chance that this type of cable would be available at any computer you may wish to connect to. Other devices, such as this Z-Cyber Zling player (<http://www.geeks.com/details.asp?invtid=8MMC-ZL GU2-512&cat=MP3>), feature a standard USB male connector right on the body of the device. With this design, the player can either be plugged directly into an available USB port, or if the size/shape of the device prevents this, a more typical USB cable is all that is needed.

Size

The size of an MP3 player will be in large part determined by the combination of other features included with the device. Hard drive-based players are generally going to be larger than flash memory-based players due to the physical size of the drive. The type and quantity of batteries, the size of the display, and the type of computer interface provided may all impact the size of the device as well.

MP3 players are generally quite small, and for the most part are only as large as they are for two simple reasons: so the users don't lose them, and due to other technologies involved. For example, some MP3 players that utilize two AAA batteries for power are barely wider and slightly longer than the batteries themselves, providing just a little thickness upfront for the flash memory, circuitry, and display. If a smaller, reliable power source was available, who knows how small these devices could be.

Someone seeking a miniature device with a modest amount of storage for use while jogging may be able to find something about the size and weight of a pack of gum. And although an iPod can in no way be considered a large object, in the world of MP3 players it is bigger than most, and is geared towards a different application.

Final Words

MP3 players come in a wide variety of shapes, sizes, and capabilities, all of which need to be addressed while considering what may be the most important feature... Price. Given the great number of devices on the market today, there just may be a device out there to fit everyone's needs, and hopefully this Tech Tip will serve as a guide to what a user's basic needs may be.