## About Mac computer startup tones

Learn about the different sounds your computer makes when it starts up and what they mean.

Mac computers can produce several sounds when starting up. Your Mac should produce the familiar single tone on start up. If you hear one of these tones, it might mean there's a problem with your computer:

- 1 tone, repeating every 5 seconds: This indicates no RAM is installed.
- 3 successive tones, a 5 second pause (repeating): This indicates RAM does not pass a data integrity check. - Most likely the 'newer' RAM (not the original RAM) that is corrupted
- 1 long tone while holding down the power button: Indicates an EFI ROM update is in progress on a computer manufactured before 2012.
- 3 long tones, 3 short tones, 3 long tones: Indicates EFI ROM corruption is detected and the computer is in EFI ROM recovery mode. – Insert a Firmware update disc while the tones are sounding, wait for computer to boot and files will run automatically (if no disc see link beloew)

If you need to restore the EFI ROM on certain Mac computers produced before 2008, you'll need to use a Firmware Restoration CD to restore the EFI ROM. Search <u>Apple Downloads</u> for the right CD image for your computer.

Newer computers automatically recover from a corrupted ROM; when this occurs, a progress bar appears on the screen during ROM recovery mode. Do not disturb the machine while the ROM recovery is taking place. It will restart back into OS X when recovery is complete.