



## Apple Mac - Startup options

Here we detail the startup key combinations you can use if your Mac is having problems or you need to reset / recover it.

To use any of these key combinations, press and hold the keys immediately after pressing the power button to turn on your Mac, or after your Mac begins to restart. Keep holding until the described behaviour occurs.

(All details from <https://support.apple.com/en-gb/HT201255>)

---

<b>Command (⌘)-R</b>	Start up from the built-in macOS Recovery system. Or use Option-Command-R or Shift-Option-Command-R to start up from macOS Recovery over the Internet. macOS Recovery installs different versions of macOS, depending on the key combination you use while starting up. If your Mac is using a firmware password, you're prompted to enter the password.
<b>Option (⌥) or Alt</b>	Start up to Startup Manager, which allows you to choose other available startup disks or volumes. If your Mac is using a firmware password, you're prompted to enter the password.
<b>Option-Command-P-R</b>	Reset NVRAM or PRAM. If your Mac is using a firmware password, it ignores this key combination or starts up from macOS Recovery.
<b>Shift (⇧)</b>	Start up in safe mode. Disabled when using a firmware password.
<b>D</b>	Start up with the Apple Diagnostics utility. Or use Option-D to start up this utility over the Internet. Disabled when using a firmware password.
<b>N</b>	Start up from a NetBoot server, if your Mac supports network startup volumes. To use the default boot image on the server, hold down Option-N instead. Disabled when using a firmware password.
<b>Command-S</b>	Start up in single-user mode. Disabled in macOS Mojave or later, or when using a firmware password.
<b>T</b>	Start up in target disk mode. Disabled when using a firmware password.
<b>Command-V</b>	Start up in verbose mode. Disabled when using a firmware password.
<b>Eject (⏏) or F12 or mouse button or trackpad button</b>	Eject removable media, such as an optical disc. Disabled when using a firmware password.

---