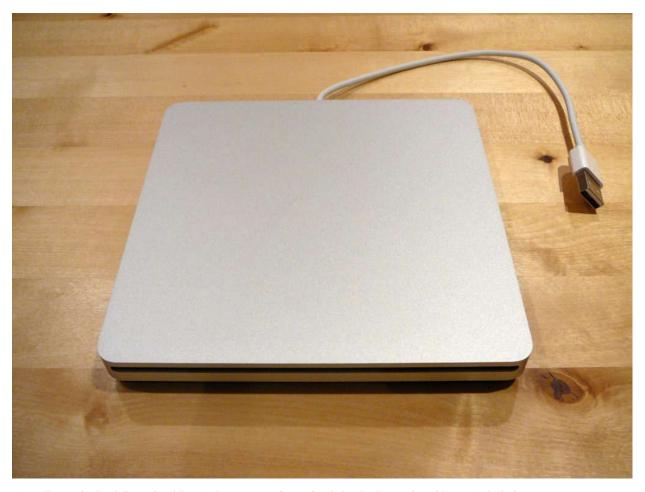
Use Apple's USB SuperDrive with Linux



I'm really surprised and disappointed that Apple prevents us from using their USB SuperDrive with non Apple devices.

How to outsmart Apple's firmware

Fortunately, with a little hack, we can awake the drive from its deep slumber. It's required to send a "magic" byte sequence after the drive was connected. I got this byte sequence from a source I no longer can find on the web. So, I don't take full credits for this.

You have several options for making this work. In this post I'd like to unveil two of them.

Unlock with SCSI Generic (sg) driver

For communicating with the SCSI device directly we need the Linux SCSI Generic (sg) driver packages.

Debian

sudo apt-get install sg3-utils

Lookup the device, it should be sr0 or sr1 by default depending on how many USB disc drives are currently attached. Check the output of following command to get a list off all device paths:

1s /dev

After you've the SuperDrive identified, we'll send the magic sequence to the device.

Do magic

sg_raw /dev/sr0 EA 00 00 00 00 00 01

Try to insert a disc, the drive should be awake now and start initialising the disc. For now the last step is necessary each time the drive is unplugged, so let's automate it!

Custom udev rule

We'll make us of the udev device manager. It runs as a deamon and receives events each time a device is initialised or removed. Furthermore, it features an extensible rule set for easy customising. Please check out this very good guide for further instructions.

```
Let's write such a custom rule.

# Debian
sudo nano /etc/udev/rules.d/99-local.rules
```

Add following rule definition.
Initialise Apple SuperDrive
ACTION=="add", ATTRS{idProduct}=="1500", ATTRS{idVendor}=="05ac", DRIVERS=="usb", RUN+="/usr/bin/sg_raw /dev/\$kernel EA 00 00 00 00 01"

This will do the "magic" each time a SuperDrive device is connected. To test the rule, disconnect the drive and connect it again, the drive should be unlocked, already.

Unlock with Superdrive-Enabler

Superdrive-Enabler is a little app that sends the magic byte sequence to a device.

Superdrive-Enabler for Raspberry Pi

I precompiled a binary for the Raspberry Pi in cases where you can't or don't want to install "sg3-utils". Make sure that SuperDrive is connected via an active USB hub to the Pi. Copy the executable binary to your Raspberry with SMB or WGET.

download binary
wget https://github.com/onmomo/superdrive-enabler/raw/master/dist/rpi/superdriveEnabler_rpi
make binary executable
chmod +x superdriveEnabler_rpi

Other distributions

```
Easily compile the superdrive-enabler source.

# Download the source from my github repository
wget https://raw.githubusercontent.com/onmomo/superdrive-enabler/master/src/superdriveEnabler.c
# compile it
gcc -o superdriveEnabler superdriveEnabler.c
# Make it executable
chmod +x superdriveEnabler
```

Custom udev rule

Let's write a custom rule in a new *.rules file or separated by a line break in an existing rules file. # Debian sudo nano /etc/udev/rules.d/99-local.rules

Add following rule definition.

Initialise Apple SuperDrive with superdrive-enabler
Make sure that you adjust the path to the superdriveEnabler on your system
ACTION=="add", ATTRS{idProduct}=="1500", ATTRS{idVendor}=="05ac", DRIVERS=="usb", RUN+="/home/pi/superdrive-enabler/superdriveEnabler /dev/\$kernel"

This will trigger the "superdriveEnabler" app with the device path as parameter (e.g /dev/sr0) each time a SuperDrive device is connected. Reconnect the drive again and enjoy your CD/DVD collection with XBMC or any other media player!