Raspberry Pi RTC

Here's the basic steps you need to get the Pi RTC Module going on the latest Raspbian distribution you can download from the Raspberry Pi Foundation's website.

```
# Remove the module blacklist entry so it can be loaded on boot

sudo sed -i 's/blacklist i2c-bcm2708/#blacklist i2c-bcm2708/' /etc/modprobe.d/raspi-blacklist.conf

# Load the module now

sudo modprobe i2c-bcm2708

# Notify Linux of the Dallas RTC device

echo ds1307 0x68 | sudo tee /sys/class/i2c-adapter/i2c-1/new_device

# Test whether Linux can see our RTC module.

sudo hwclock
```

That's it! You can also add the i2c initialisation command to rc.local which means it will be run at every boot up;

```
# Add the RTC device on boot

sudo sed -i 's#^exit 0$#echo ds1307 0x68 > /sys/class/i2c-adapter/i2c-1/new_device#' /etc/rc.local

echo exit 0 | sudo tee -a /etc/rc.local
```

This doesn't cover automatically setting the clock on boot and but you can do so by adding another line (above exit 0) to rc.local with;

```
hwclock -s
```

Reference website:

http://nicegear.co.nz/blog/using-an-i2c-real-time-clock-rtc-with-a-raspberry-pi/