

Ultra Short Installation Procedure of the UPS Pico HV3.0 Daemons and UPS Pico HV3.0 email broadcasting System

1. Install Raspberry Pi Operation System (i.e. NOOBs)
 - **Disable the serial port (only if you need to upload a new firmware)**
 - **Enable the I2C**
2. Ensure that Python is installed and updated, by using the following command

sudo apt-get install python-rpi.gpio

3. Clone Raspberry Pi daemons and email broadcasting system from the GitHub using the following command

sudo git clone <https://github.com/modmypi/PiModules.git>

4. Move to the required directories where software has been copied.
5. First to the email broadcasting system (package)

sudo cd PiModules/code/python/package

6. Then proceed with the installation of the email package software

sudo python setup.py install

7. Second to the System Monitoring and File Safe Shutdown Daemons (picofssd)

cd ../upspico/picofssd

8. Then proceed with the installation of the picofssd daemons software

sudo python setup.py install

9. Once the script has been installed, it can be installed to the `SysVInit` system with the following command

sudo update-rc.d picofssd defaults

10. Enable to run at boot time with the following command

sudo update-rc.d picofssd enable

11. Now when the Pi is rebooted the daemon should start automatically.

UPS LED (Blue) Indications	
UPS LED is OFF	System is not running or is in Low Power Mode (only HW RTC is running)
UPS LED is lighting continuously	System (Pico + RPi) is booting or shutting down
UPS LED is blinking every 600 ms	System (Pico + RPi) is running on cable powering (after booting time)
UPS LED is blinking every 1200 ms	System (Pico + RPi) is running on battery powering

Ultra Short Installation Procedure of the UPS Pico HV3.0 Hardware RTC

1. Proceed with the installation of the i2c-tools using the following command

```
sudo apt-get install i2c-tools
```

2. Now edit the /etc/modules file

```
sudo nano /etc/modules
```

3. Make sure to have the following items in the file and add what is missing

```
i2c-bcm2708  
i2c-dev  
rtc-ds1307
```

4. Now edit the file /etc/rc.local

```
sudo nano /etc/rc.local
```

5. and Add the following lines, before “exit 0”

```
echo ds1307 0x68 > /sys/class/i2c-adapter/i2c-1/new_device  
( sleep 4; hwclock -s ) &
```