# Change log for the GPS Tracker Ver 1.2

- Added support for the PAM-7Q GPS module (the PAM-7Q is a drop in replacement for the UP501).

- Added an additional configuration option:
    IGNORE nn
  This will instruct the firmware to ignore any movement of less than 'nn' metres.   The default is 100 metres (ie, IGNORE 100) which is the same as V1.1 of the firmware.

- Fixed a bug which could cause a corrupted file system when subdirectories were automatically created by the firmware.


NOTE:  Due to an issue in the bootload firmware in V1.1 this update can only be loaded via a PIC32 programmer.  Also, this version does not include a bootloader, so subsequent versions will also need to be loaded via a PIC32 programmer.

The best (and cheapest) programmer is the PICKit 3 from Microchip.  Prices range from $25 for a clone of the PICKit 3 to $48 for the genuine article direct from Microchip.

Some typical sources include:

http://www.microchipdirect.com/ProductSearch.aspx?keywords=PG164130

http://www.banggood.com/Pickit3-Pickit-3-Pickit3_5-Kit3-Emulator-Programmers-Programmer-p-88947.html

http://www.ebay.com/sch/i.html?_nkw=pickit3

Do not purchase the PICKit2 – it will not program the PIC32 processor.