Ref: FAQ0190	Version: 1.0
Title – Multilog & LX Secondary channels	
Made By: AB 17/09/15	(Issue 2)

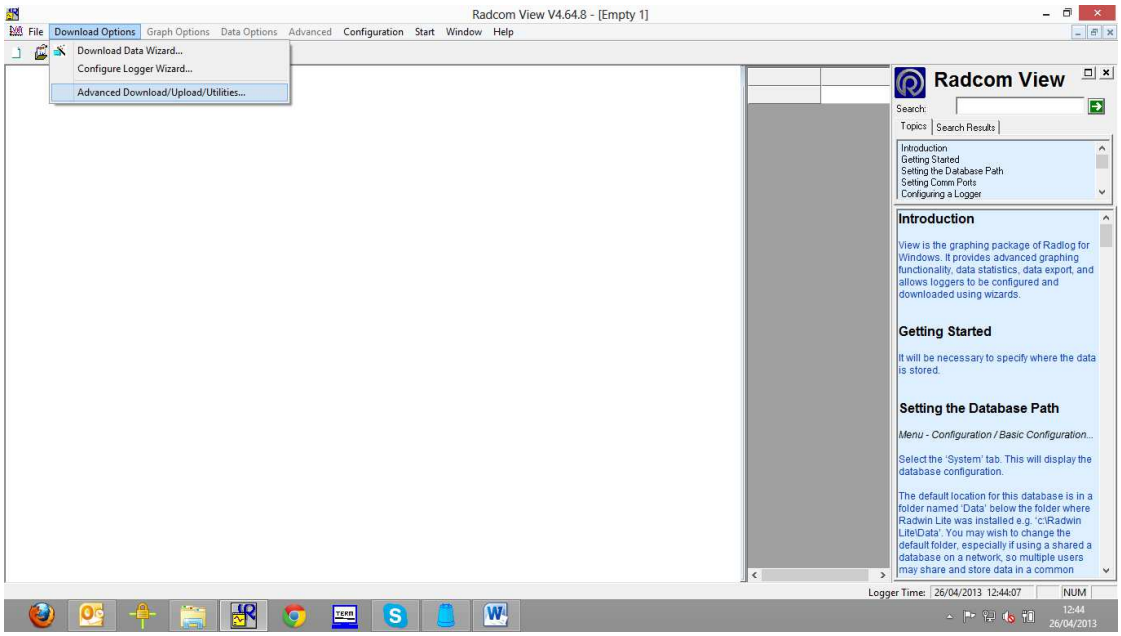
Multilog and LX loggers - How to set up Secondary channels

Main Recording, Secondary Channels and Pseudo Channels

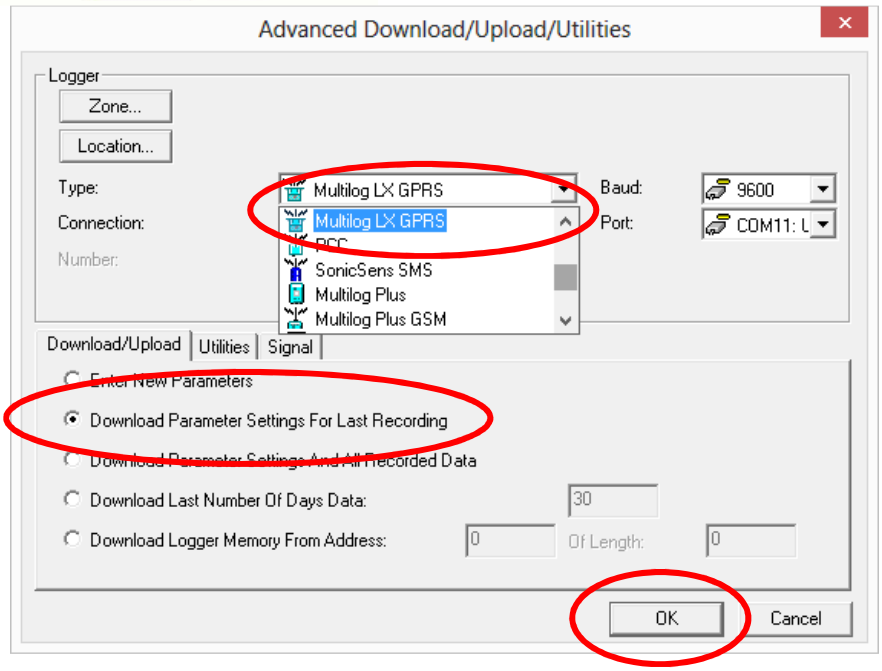
The pseudo channel can be configured to store the minimum or maximum readings of the secondary recording channel at the same sampling rate as the main recording.
Example:
Main recording sampling rate = 15 minutes
Secondary Recording Sample rate = 1 Second
The Secondary Recording Sample rate will take 900 readings during the 15-minute sampling period of the main recording. These 900 readings are sorted by highest and lowest values. The highest, lowest or average value of any of the 900 readings can be stored in the pseudo channel.
In the case of pressure input it is possible to detect the presence of pressure surges by storing the maximum readings and for digital flow inputs it is possible to give an accurate measurement of Minimum Night Flow by storing the minimum flow rates.

How to configure –

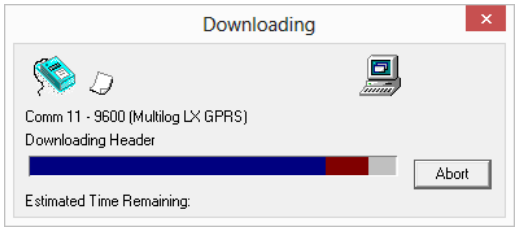
For a Multilog or Multilog LX data loggers use Radwin View for the configuration
Go to Download options > Advanced Download/Upload/Utilities –



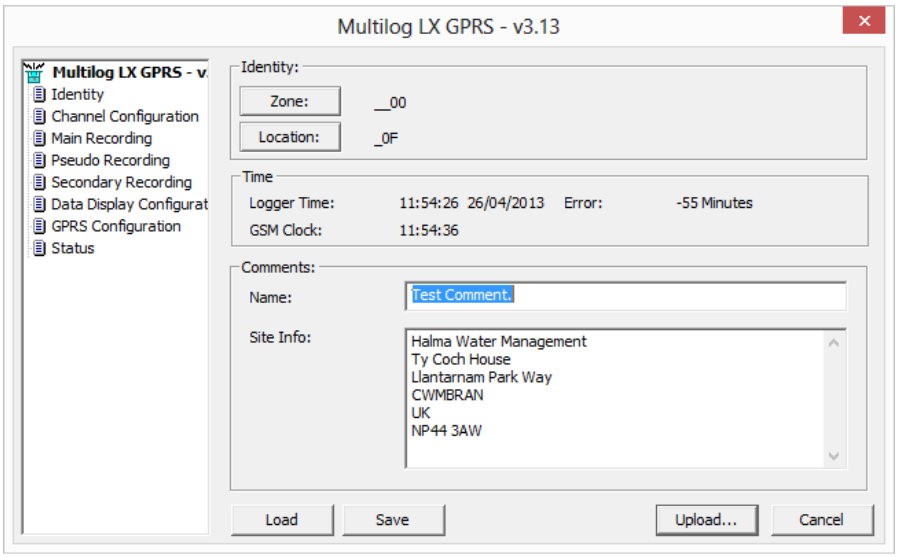
From the drop down select the correct logger type and 'Download parameter Settings for last recording' then 'OK'



The logger will now download -

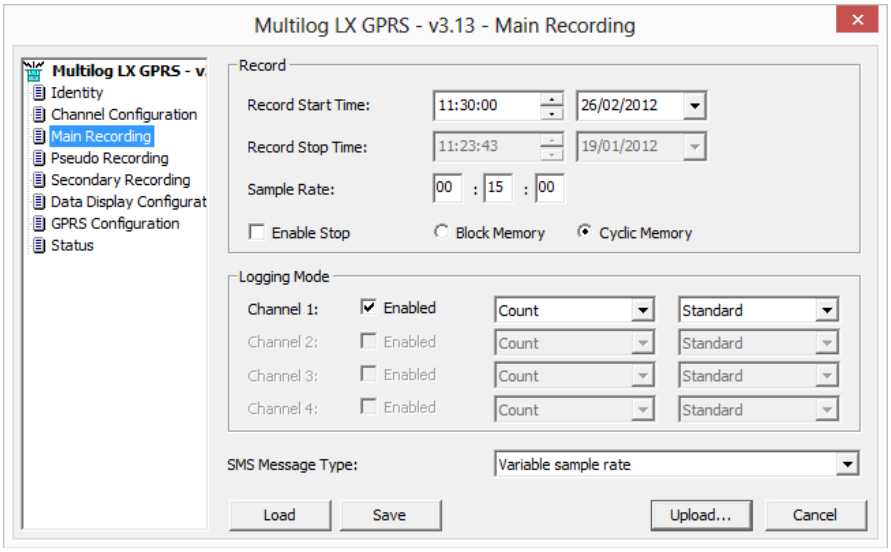


And will give this screen –

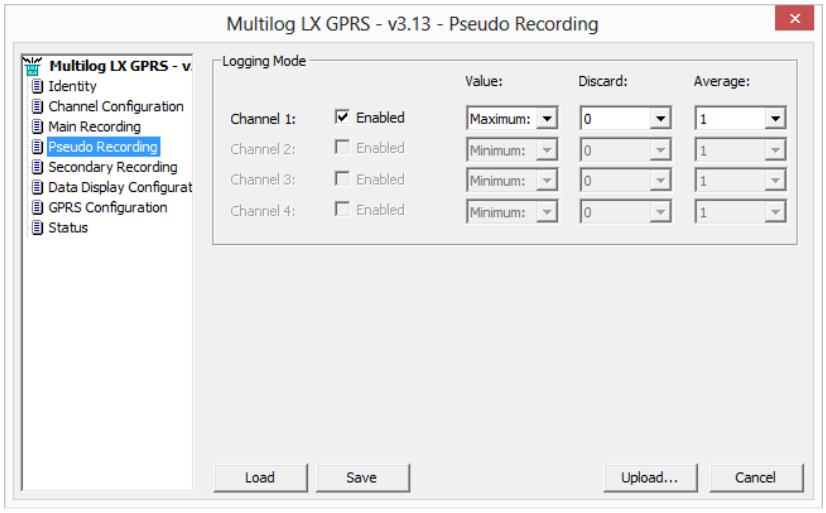


The Identity tab gives the logger ID information
The Channel configuration tab gives the channels that the logger ids equipped with.

The Main recording tab gives the configuration of the loggers primary channels as below –

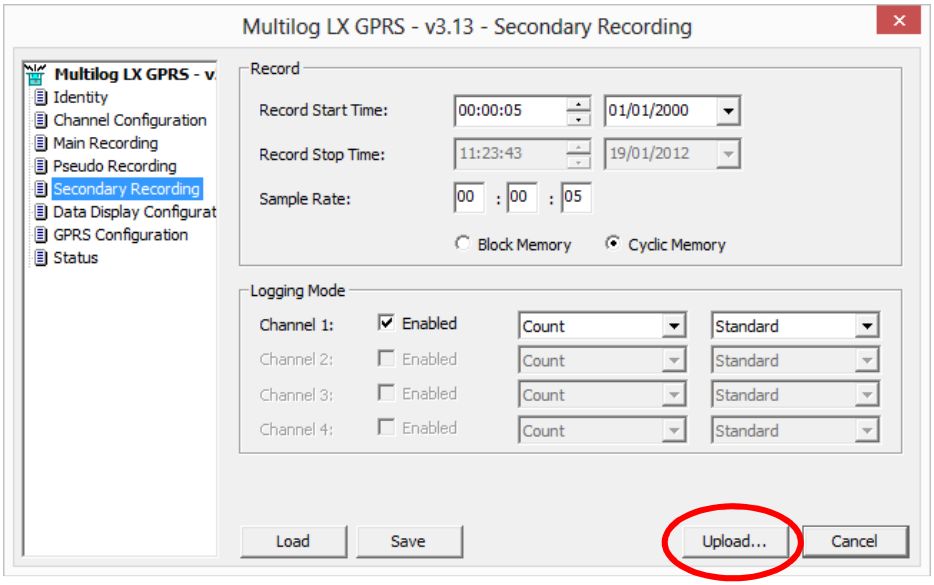


To operate a secondary channel you first go to the pseudo recording tab –



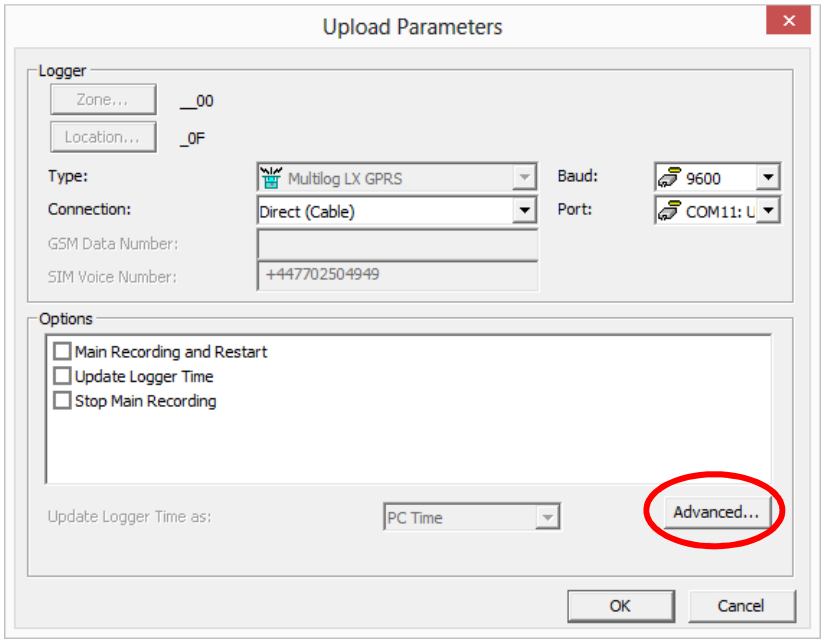
The pseudo channel can be configured to store the minimum or maximum readings of the secondary recording channel at the same sampling rate as the main recording.
For example:
Main recording sampling rate = 15 minutes
Secondary Recording Sample rate = 1 Second
The Secondary Recording Sample rate will take 900 readings during the 15-minute sampling period of the main recording. These 900 readings are sorted by highest and lowest values. The highest, lowest or average value of any of the 900 readings is then stored in the pseudo channel.
In the case of pressure input it is possible to detect the presence of pressure surges by storing the maximum readings and for digital flow inputs it is possible to give an accurate measurement of Minimum Night Flow by storing the minimum flow rates.

Next, go to the Secondary recording tab and configure the settings for what you require the Secondary channel to record -

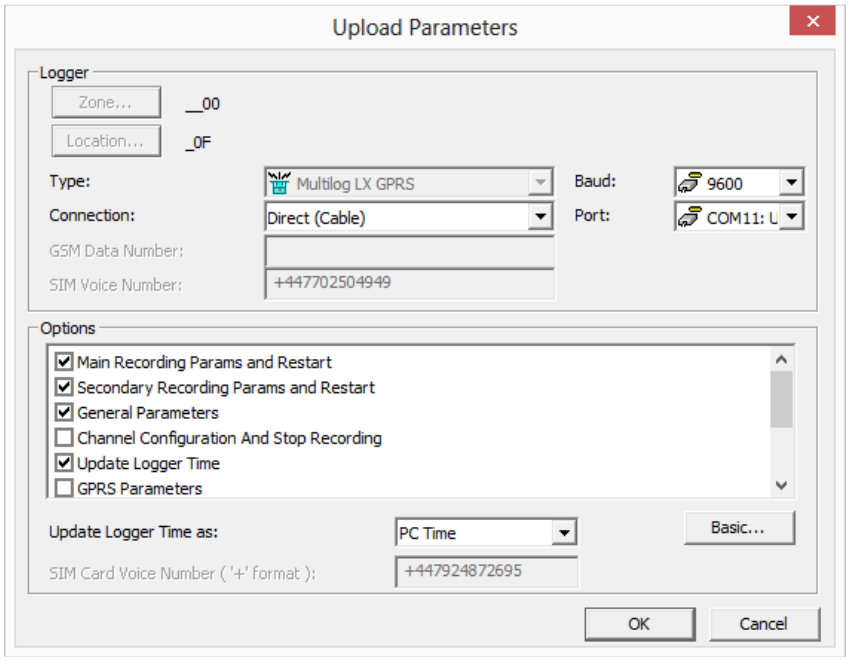


If your configuration is now complete select the 'Upload' button

Then select 'Advanced' -



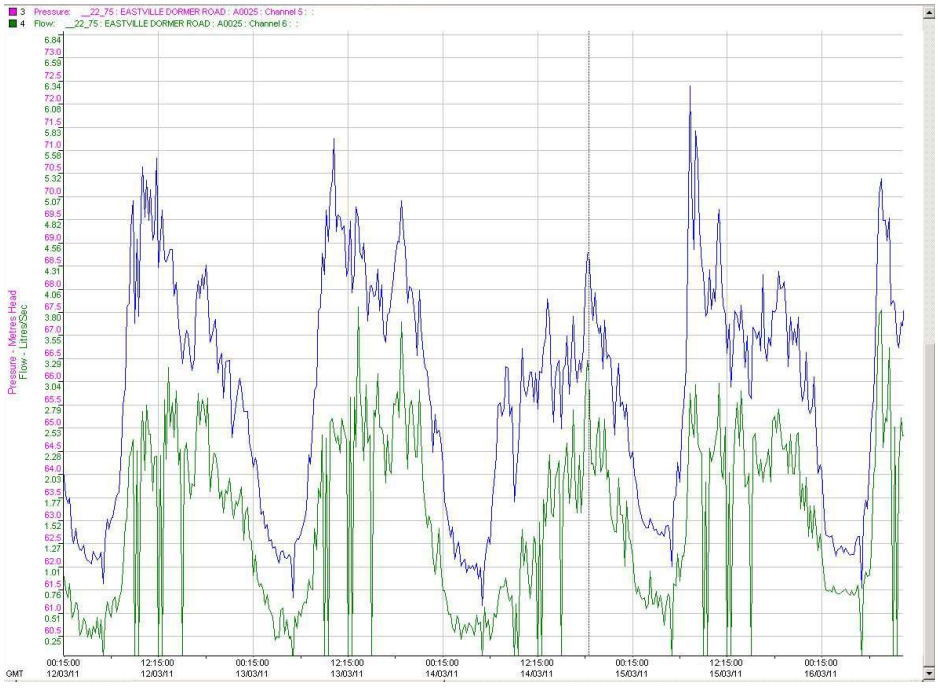
Tick the boxes as required and then 'OK' to upload the configuration to the logger



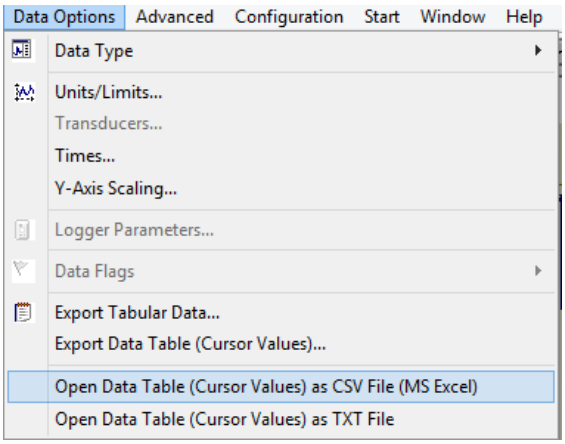
This completes the configuration for the Secondary channels on the logger

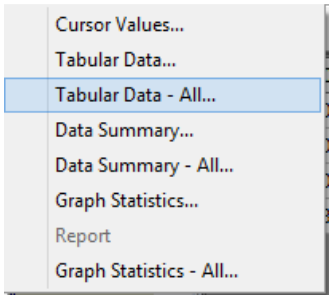
Downloading Data

With a telemetry logger you can only get pseudo data sent in by GPRS or SMS (you cannot get the Secondary channel data sent in) and the pseudo data will appear on the graph as Channel 5 and 6 if your primary channels are 1 and 2.
So the graph below shows the pseudo output 5&6 - from a Pressure Ch1 and a flow channel 2.

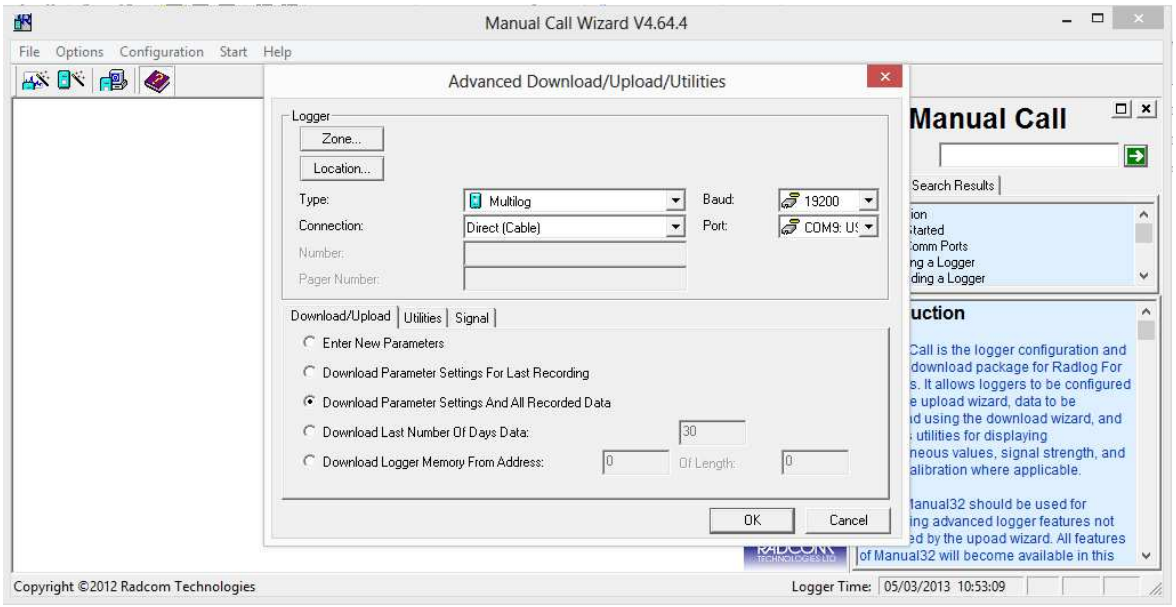


The data relating to this graph can be viewed by going to Data options and selecting one of the data exports, or Opening the data table or using the Data type menu and selecting one of those.





However if you want to see the Secondary data then you can do this by manually downloading the logger using Manual Call > Options > Advanced Download/Upload/Utilities > Download Parameter settings and all recorded data -



When you select OK you will be given a choice of which Channel type you want to download –

You will be able to tell the difference because the secondary channel will be at the fast sample rate.
If necessary you can then superimpose the secondary data over the primary (Main) data graph.

You can also remotely download the Secondary recording by using Manual Call to remotely access the logger during a Power window and repeating the above process.

Viewing the data is the same as for the telemetry option above.

Document History:

Edition	Date of Issue	Modification	Notes
1st		Release	
2nd	17/09/15	Format update	