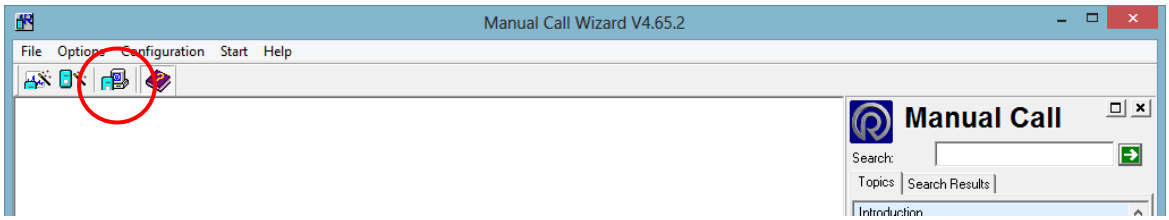
Ref: FAQ0038	Version: 1.0
Title – LX Configuration for float switch	
Made By: AB_150514 (Issue 1)	

User guide for configuring a float switch with a Radcom data logger

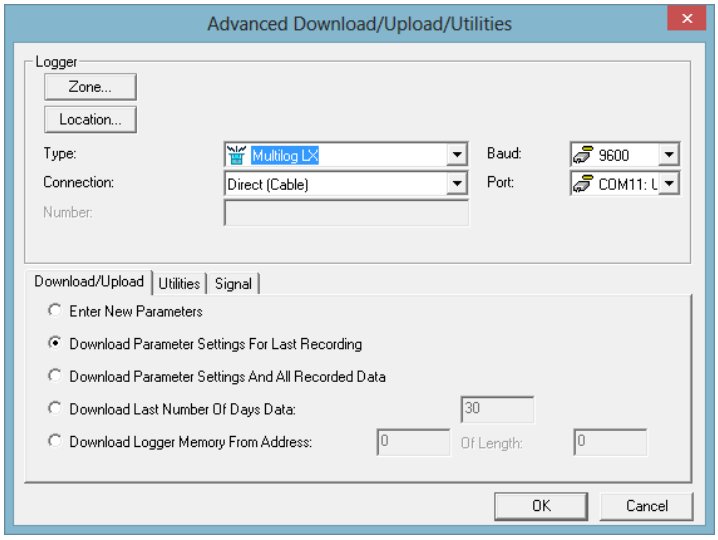
Note – in the example shown a Multilog LX SMS logger is used – if the logger is GPRS the procedure is the same except you need to substitute Multilog LX GPRS for the logger type and configure GPRS settings instead of SMS settings.

Logger Configuration for Float switch

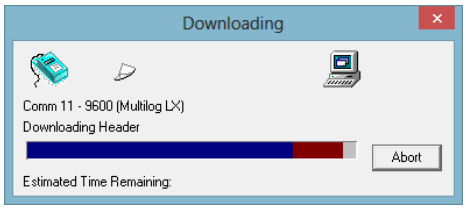
To configure the logger, you need to open 'Radcom Manual Call'.



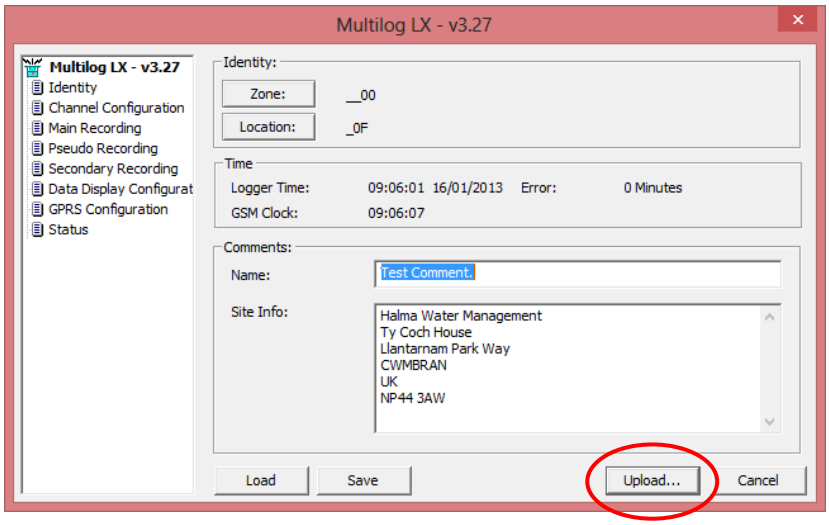
Click the 'Advanced Download/Upload/Utilities' button.
Select your Logger type from the drop-down menu, the Baud rate will automatically update. Select the correct Comm port which the logger is connected to.



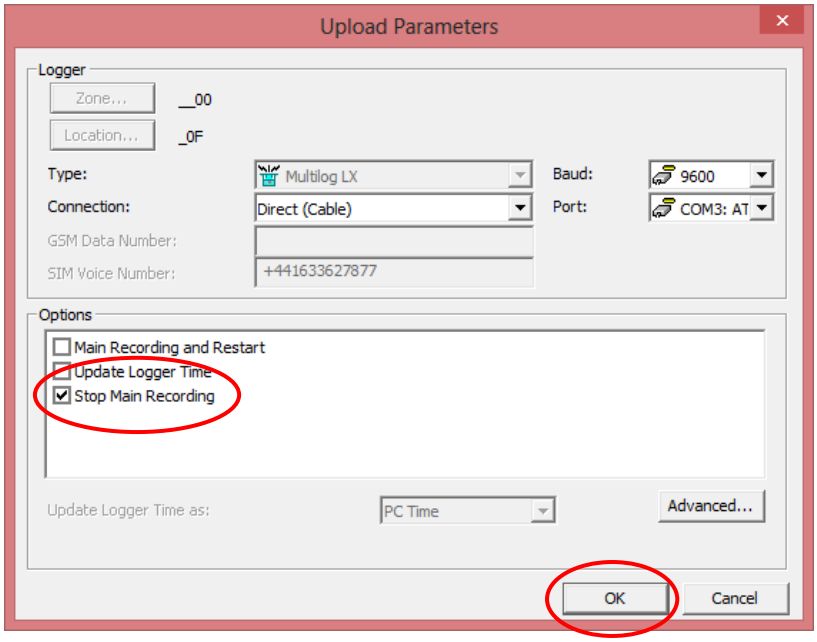
Click 'Download Parameter Settings For Last Recording' and the 'OK' button to continue.
The information will then start downloading from the logger.



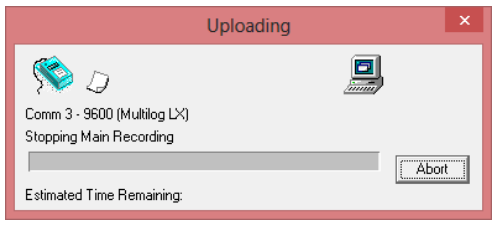
Ensure that the logger has stopped recording before continuing. To do this, click the Upload button –



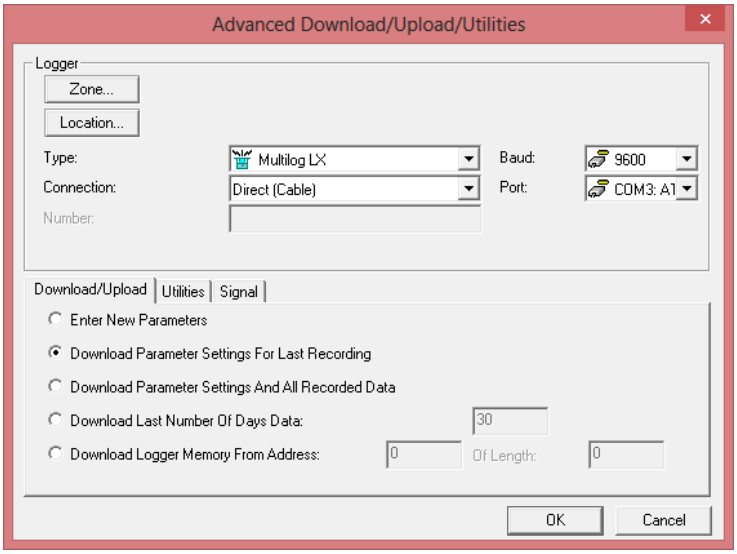
Check the ‘Stop Main Recording’ checkbox, and click the ‘OK’ button.



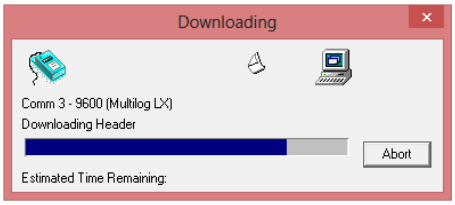
A box should appear to show that the Logger recording is stopping.



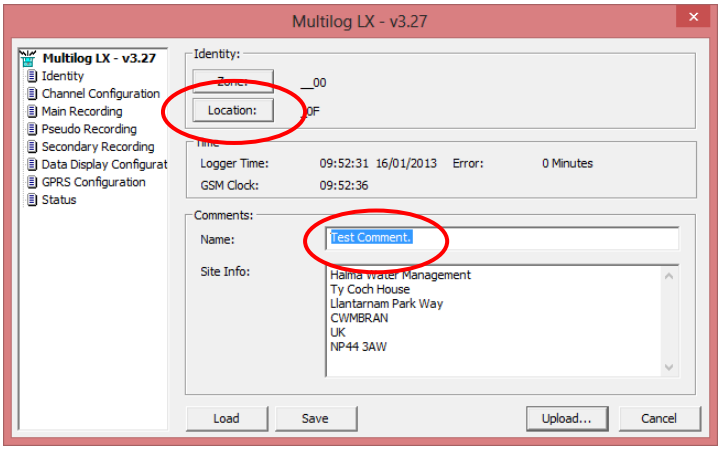
To start programming your logger, select your Logger type from the drop-down menu, the Baud rate will automatically update. Select the correct Comm port which the logger is connected to.
Click ‘Download Parameter Settings For Last Recording’ and click the ‘OK’ button to continue.



The information will then start downloading from the logger.

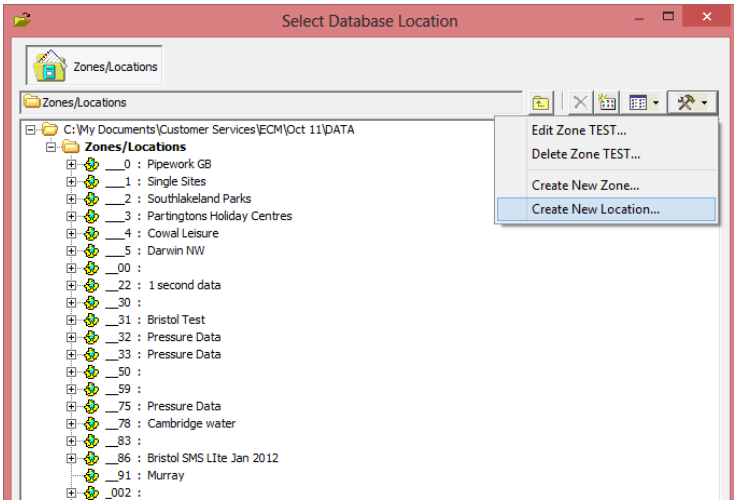


If you are using Alarms put a comment in the ‘Comments’ ‘Name’ box (above) as you wish it to appear in any text messages that are sent to recipients mobile phones. (For example location name and what is being measured)

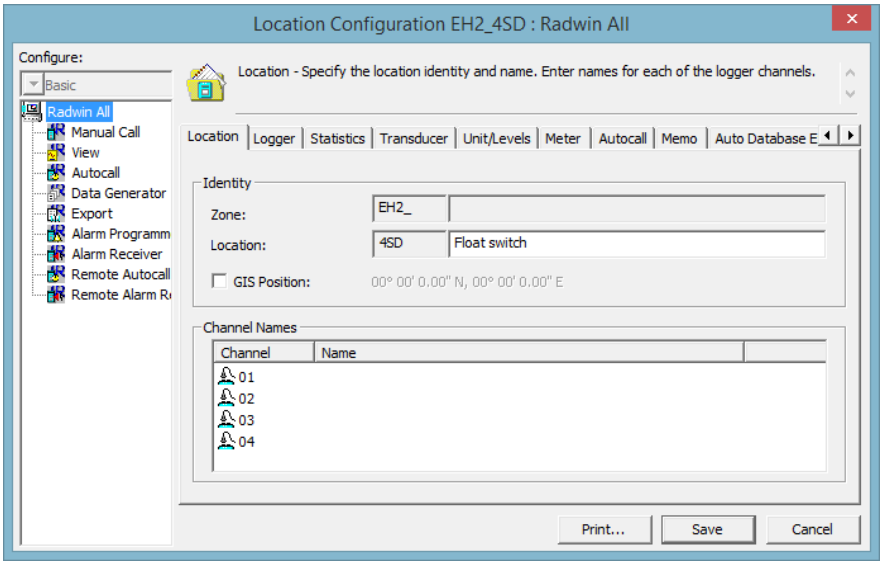


Click the ‘Location’ button to choose a new Location for the logger.

To create a new Location, select the Zone in which it is to be located, then click the 'Tools' button, and then click 'Create New Location…'.



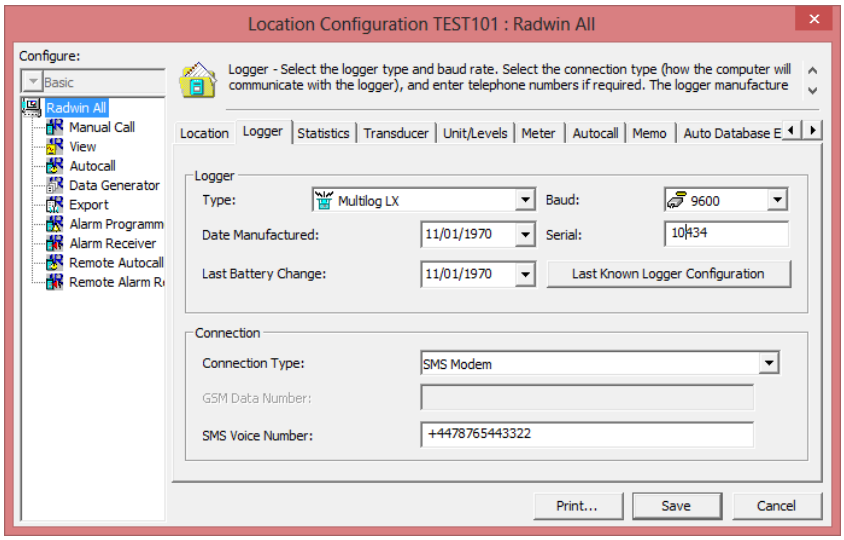
The Location Configuration screen will open. Enter your new Location number (and comment if required) as highlighted below.



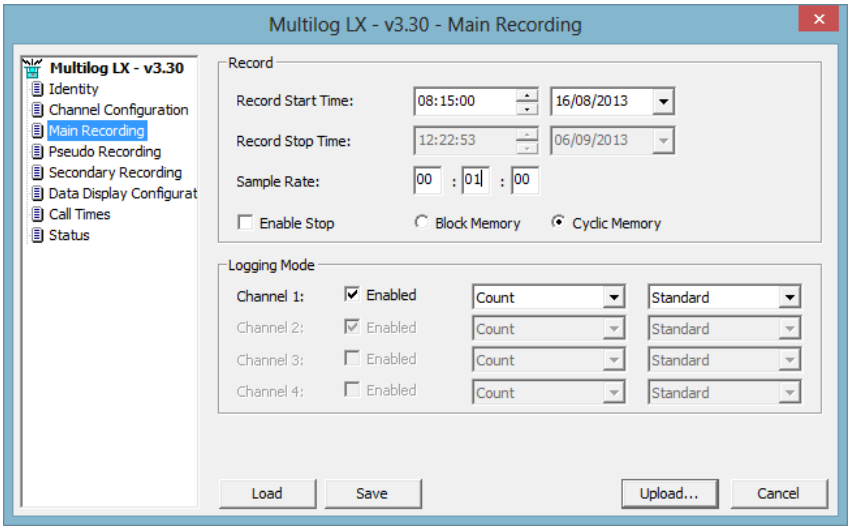
Click the ‘Logger’ tab, and change the following:

- Select ‘SMS Modem’ from the Connection Type drop-down menu.

- Enter the phone number of the logger in the SMS Voice Number text box **in International format (e.g. for UK +44)**.

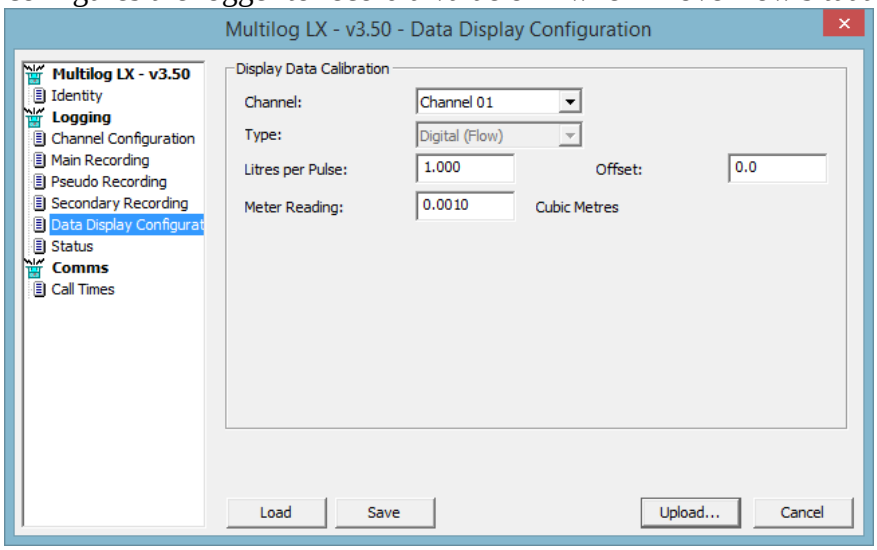


Go to main recording tab and change the sample rate to 1 minute (the smallest sample rate for an LX logger) Ensure the channel is ‘Enabled’ (box ticked) ‘Count’ and ‘Standard’ are configured

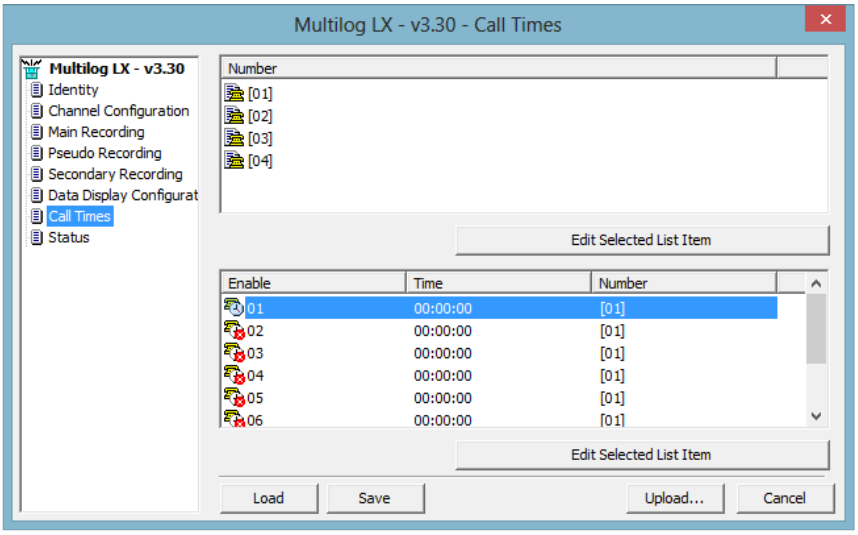


Go to the Data Display configuration Tab and for Channel 1 enter a 'litres per pulse value' of 1.000 and a 'Meter Reading' of 0.001

The pulse value configures the logger to record a value of 1 when in overflow situation –

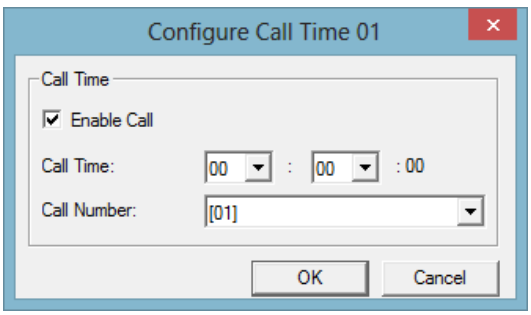


Go to the 'Call Times' tab to configure the logger call in times as required for the logger to send its data into Radwin.

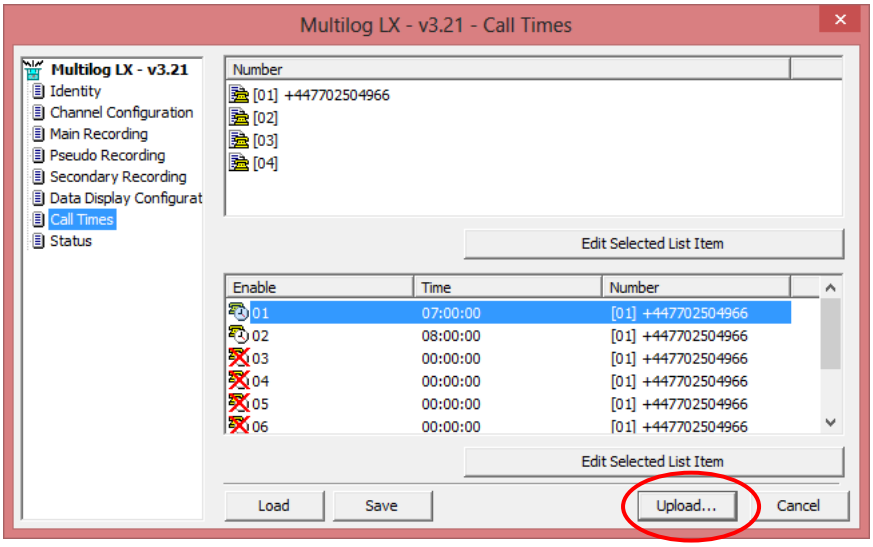


Double click on the 01 call in time -

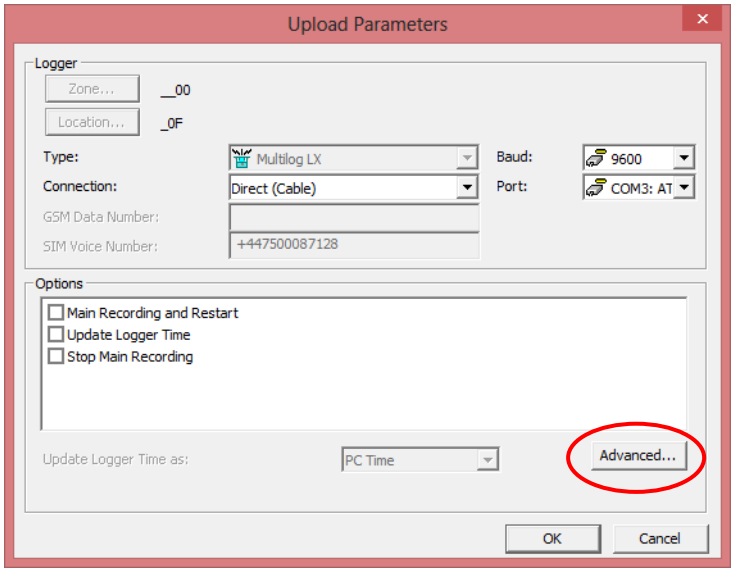
Enter the call time required and the call in number in international format (the number of the SMS modem attached to the Radwin PC)



Click the ‘Upload’ button to upload the parameters to the logger.



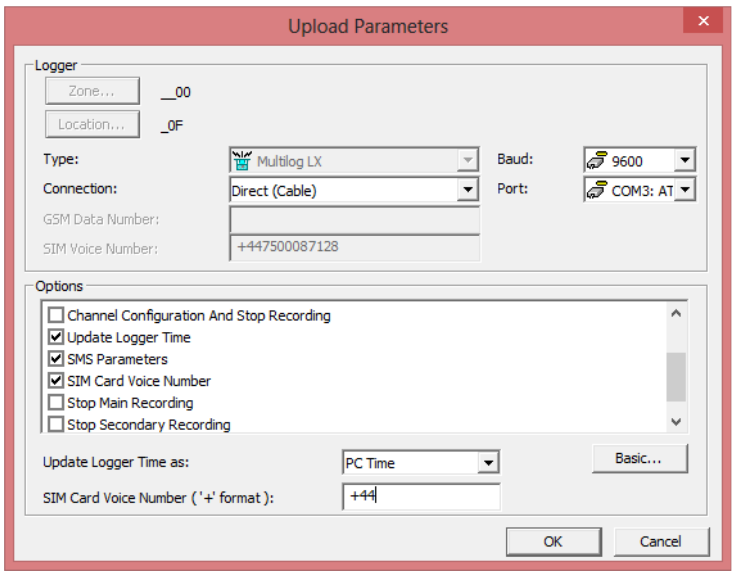
The Upload Parameters page will display.



Click the ‘Advanced’ button.

Tick the following checkboxes:

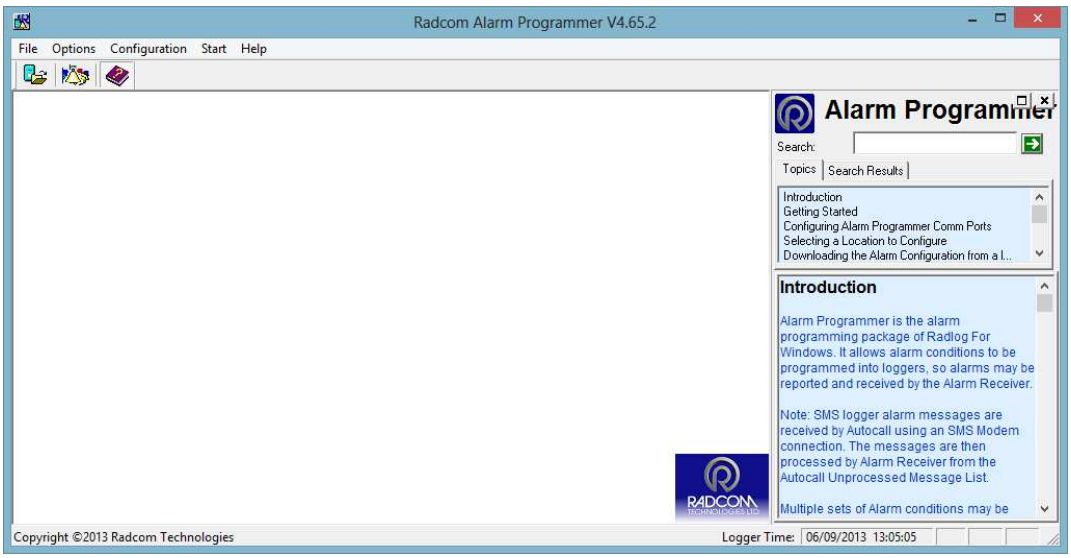
- Main Recording Params and Restart
- General Parameters
- Update Logger Time (this will enable the 'Update Logger Time as' drop down menu, where you can choose to set the logger time as the same time as your PC, or +/- up to 24 hours as required).
- SMS Parameters (or GPRS parameters)
- SIM Card Voice Number (this will enable the 'SIM Card Voice Number ('+' format)' text box where you must enter the phone number of the logger.



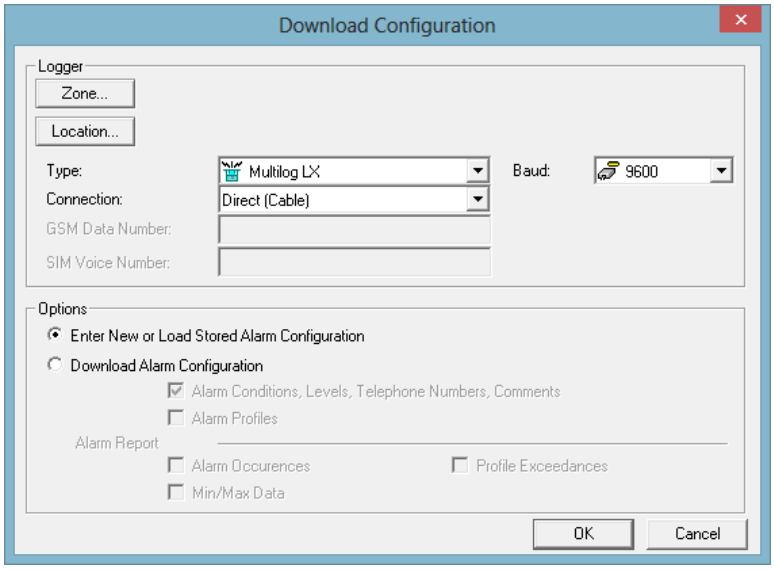
Click the 'OK' button to upload the parameters to the logger, and the Uploading box will appear. When this is complete the parameters have been uploaded to the logger.

Configuration of Alarms

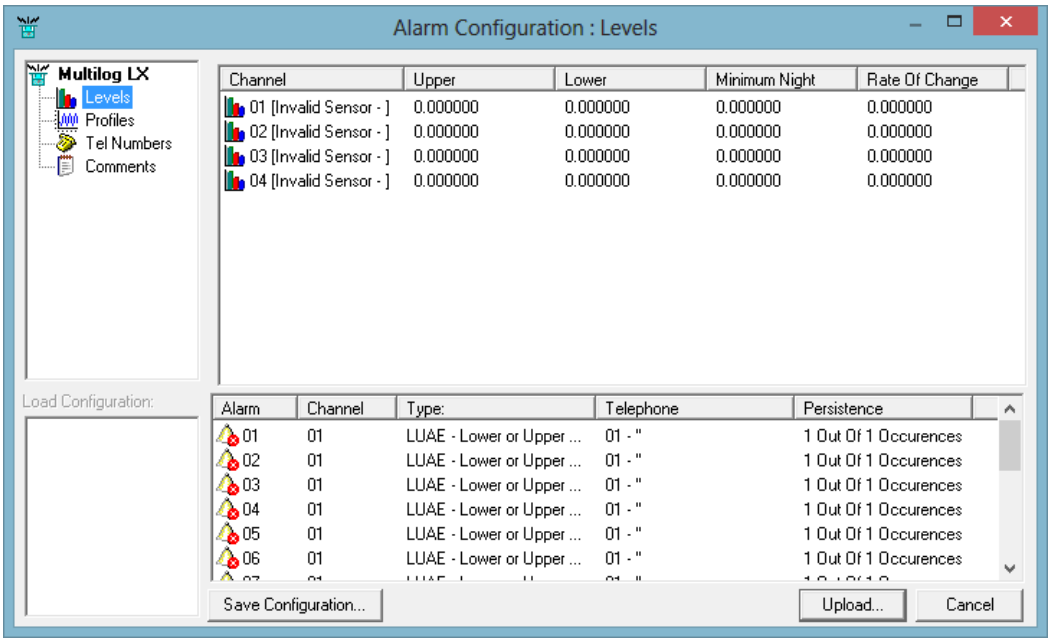
To set up alarms for the ‘Tank full’ situation –



Select Options, Alarm configuration –
Select the correct Logger type, Connection by Direct (cable) and ‘Enter New Alarm Configuration’.
Then ‘OK’

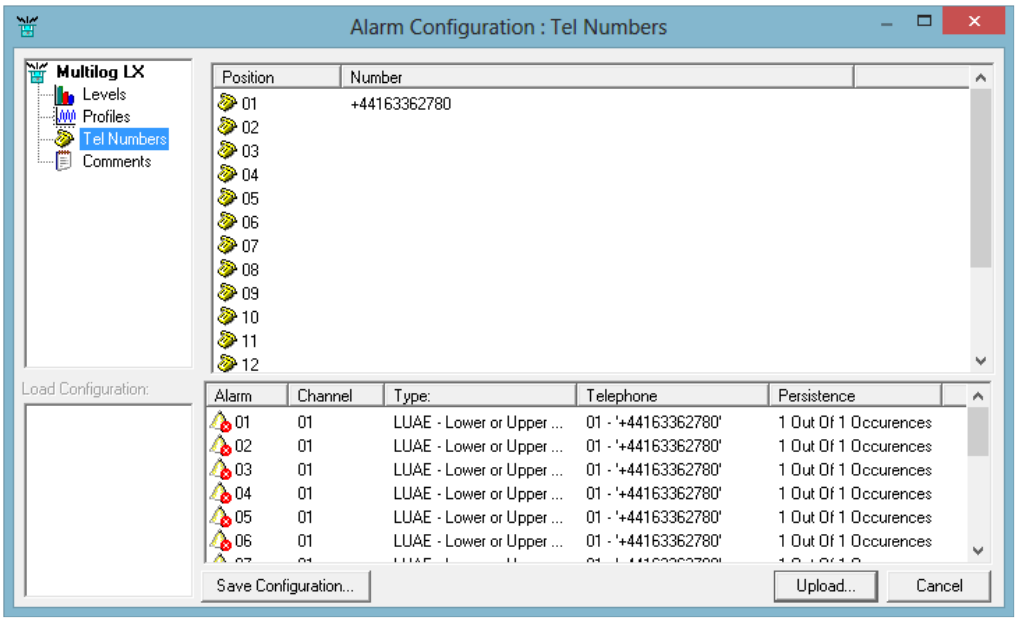


You should now see the alarm set up screen –

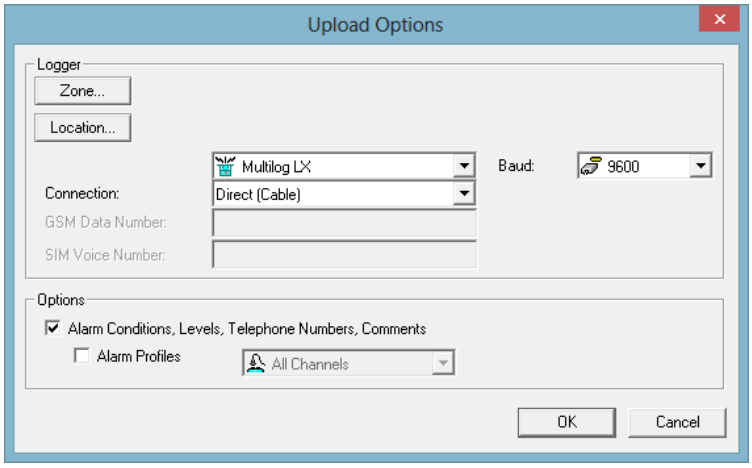


For alarm levels on Channel 1 – leave all the values at Zero. The normal 'tank empty' event has a value of Zero and the 'tank full' event has a value of 1 – so an alarm will trigger directly the status moves away from Zero (from 'Empty to Full')

In the Tel Numbers list insert the phone numbers that you want the Alarms to be sent to. Double click on each to insert the numbers.



Then select 'Upload' to load the alarm configuration to the logger.

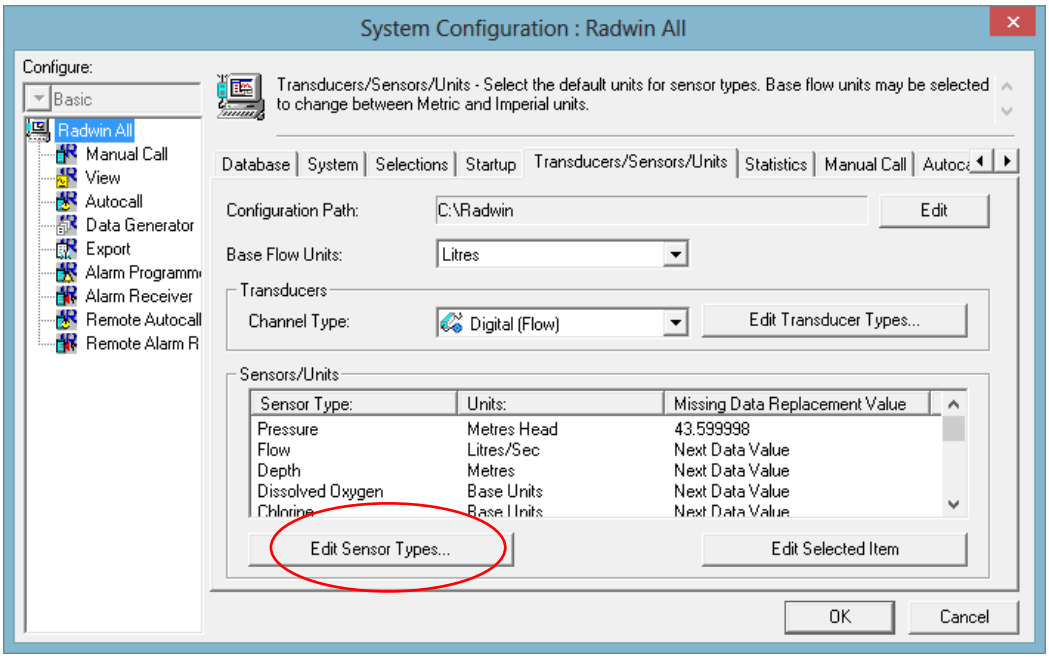


And select ‘OK’ to complete

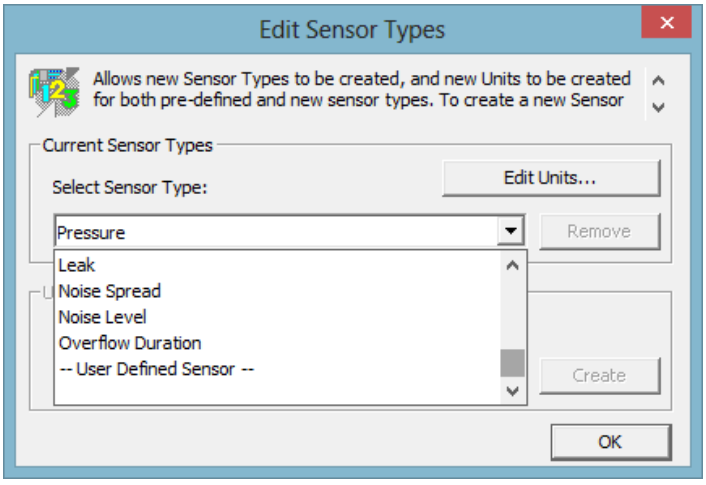
Configuration of Radwin View for float switch status graphs

If you are going to use Radwin to view the graphs of the data at any time you will need to create a Special Transducer type in order for the titles on the Graph axis to appear correct.

To do this go to Radwin Set Up > Options > System Configuration > 'Transducers/Sensors/Units' tab –

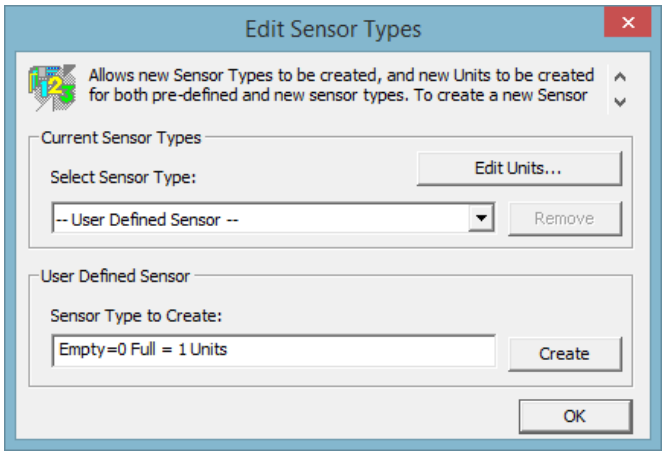


Select Edit Sensor Types –

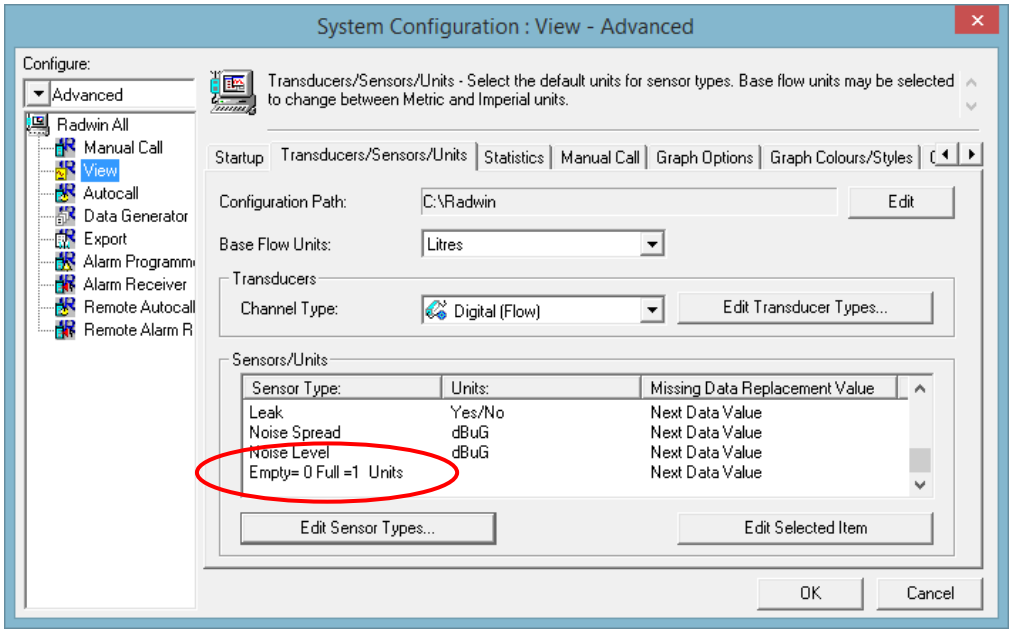


From the 'Select Sensor Type' drop down select –User Defined Sensor—

Create a new Sensor – (Tank) Full = 1 (Tank) Empty = 0 Units

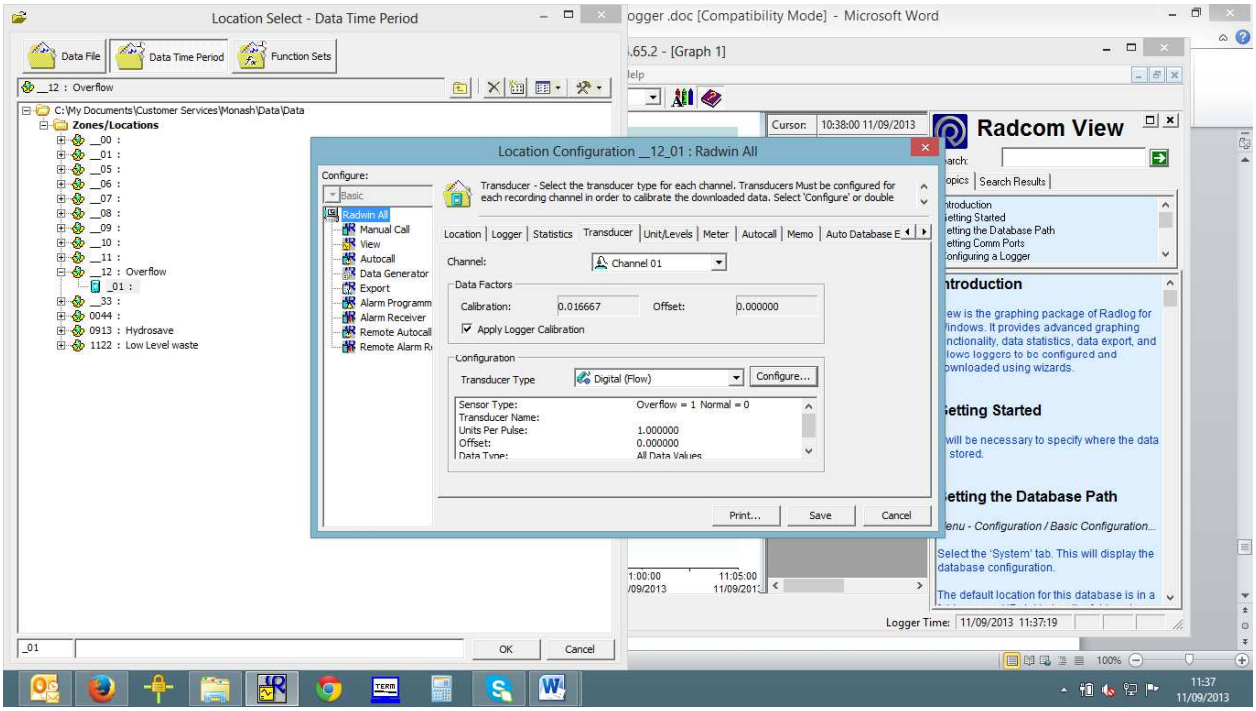


Then Select OK to save it (see below)

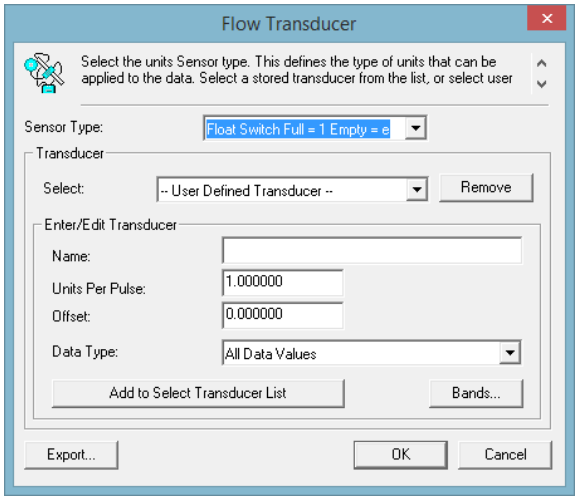


In the location Database for the float switch logger you will need to select this Sensor type so that it appears on the Y axis of the graph –

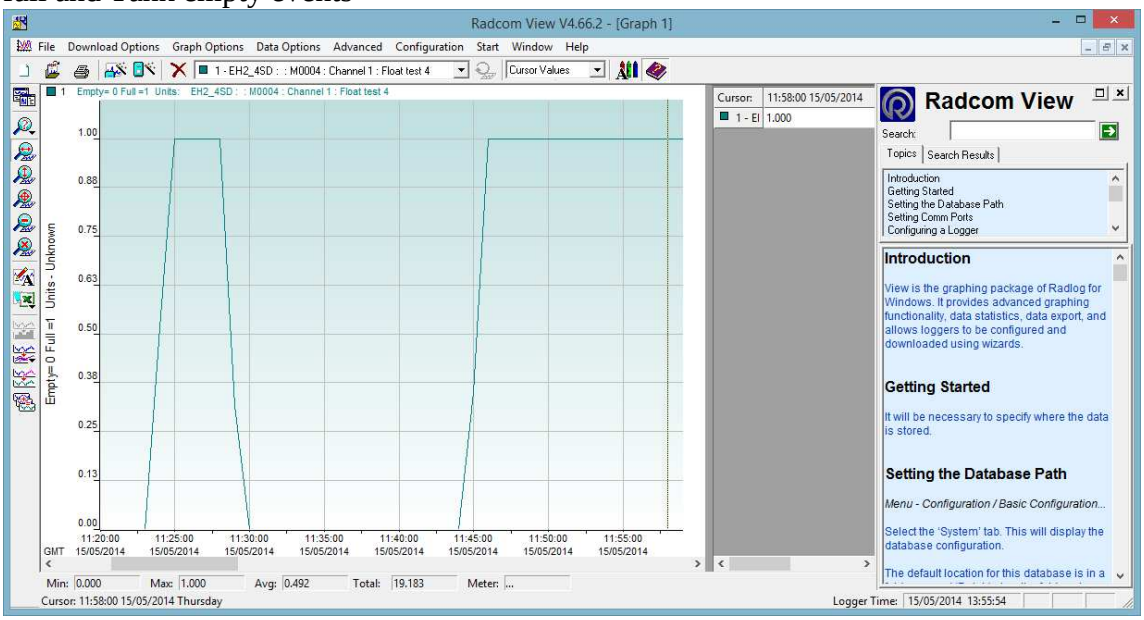
Go to the Radwin Data File, find the logger,right click on it and select ‘Location Database’ and ‘Edit location’ and select the ‘Transducers’ tab -



Then select ‘Configure’ and from the Transducer type drop down select ‘Full = 1 Empty = 0 Units ’



Now when you view the graph the X Axis will show the timescale and the Y axis will show the Tank full and Tank empty events -



The Horizontal portions of the graph at level = 1 are the durations of the overflow events. The angles in the vertical lines of the graph indicate where the event has occurred across one of the 1 minute sample rate boundaries.

Change of Status

By default the logger is factory configured to register a normal situation as = 0 and an abnormal situation as =1.

Full = 1

Empty = 0

If the reverse is required you would need to specify how the logger should be configured at point of order of the logger so it can be manufactured for that condition.

Document History:

Edition	Date of Issue	Modification	Notes
1st	15/05/14	Release	