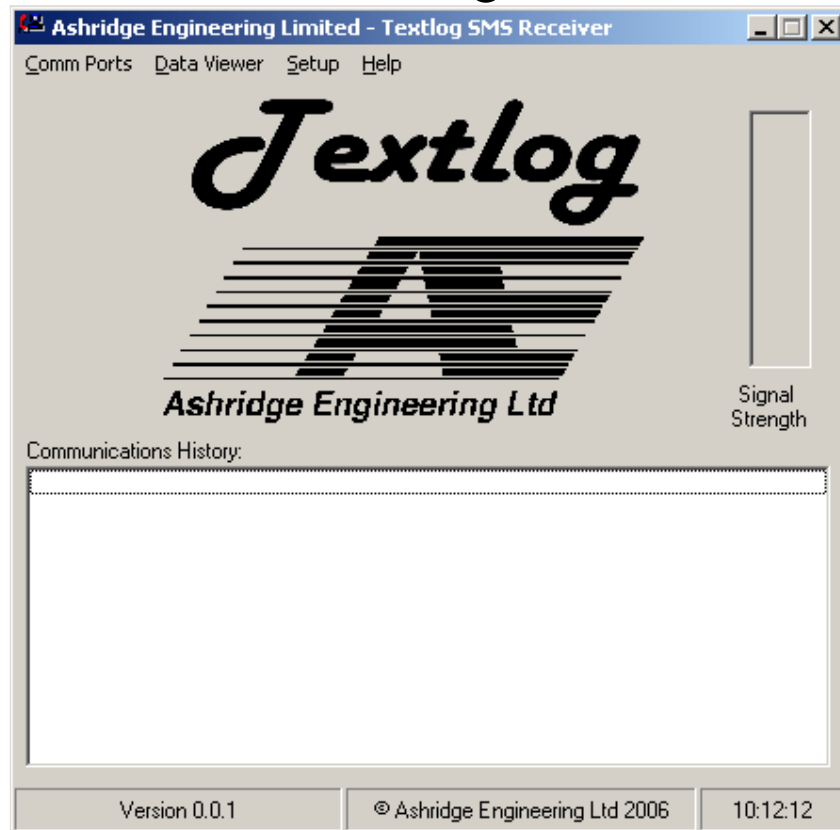


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Textlog lc



Software Version 2.1.0
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1.0 Textlog LC Software - Introduction

A multi purpose PC software program is supplied to function in conjunction with the Meter Reader hardware.

The Main functions of the software is to:

Configure settings within the Textlog LC hardware prior to installation

Remotely update Textlog LC settings via SMS

Receive Incoming SMS messages from Textlog LC and transpose the readings into text files

2.0 Installation

A standard Installshield package is supplied to assist in program installation.

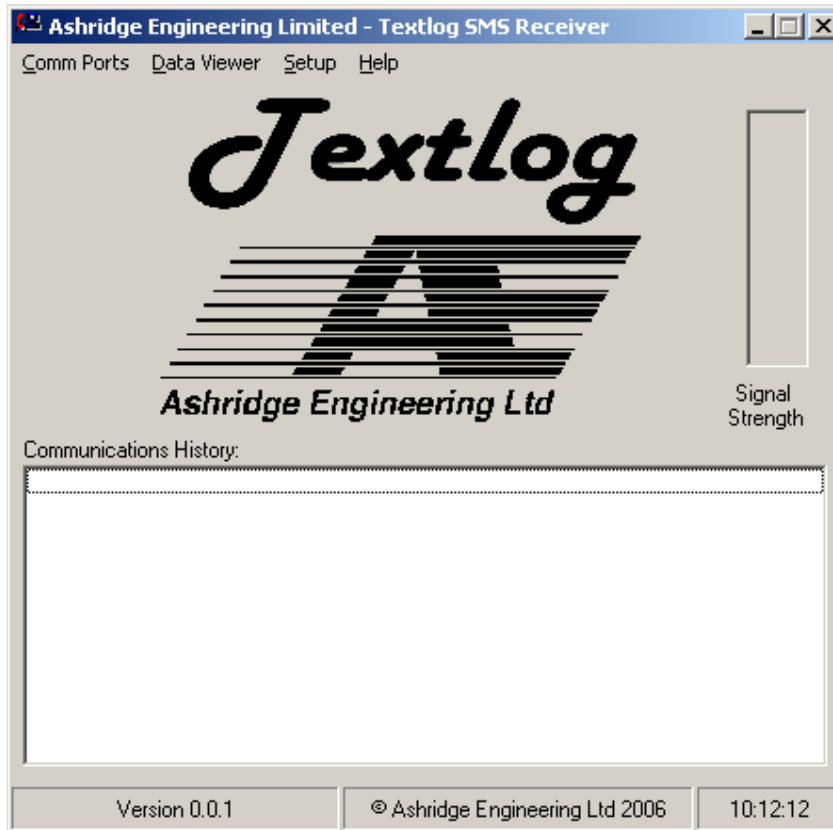
The program requires read / write access to the following registry key, and all subsequent sub-keys:

HKEY_LOCAL_MACHINE\SOFTWARE\ASHRIDGE

All user files have been set to default within the **C:\Ashridge\Textlog** directory, and full read / write access will be required for these user files.

3.0 Launching Textlog LC

On launching the Textlog LC application the following screen is displayed:



Before using any function of the program it is advisable to first check the allocations of Comm Ports (serial ports). Serial ports are used extensively within the program for communication with the SMS modem for receiving incoming messages, and for configuring the Textlog LC hardware. All settings are under the 'Comm Ports' menu.

'Modem 1' is used to define the Comm port used for the primary modem.

'Modem 2' is only used for a secondary GSM modem, or configuring the Meter Reader hardware.

Comm port settings are stored in the windows registry.

4.0 Receiving SMS Messages

The PC software will receive the incoming SMS messages from the deployed Textlogs in the field, read, decipher the messages then place the readings into the relevant text file for further processing by database systems.

By default the files are stored at the following location:

C:\Ashridge\Textlog\Logs\

This location can be changed from the windows registry by modifying the following key:

HKEY_LOCAL_MACHINE\SOFTWARE\ASHRIDGE\TEXTLOG\LOGS

The format of the log files are described in the appendixes

To start receiving SMS messages from Textlogs follow the following steps:

Connect Modem to relevant Serial port on the receiving computer, and check the modem is powered up.

Within the '**Comm Ports**' menu ensure the correct Comm Port is selected, then click '**Connect**'

Note: Whilst configuring logger units via serial communication Modem 2 needs to be disconnected from modem to allow the serial port to be used for configuring the Meter Reader.

The 'Communications History' box will display a chronological list of communication events between Textlog Receiver and the GSM modem.

When successfully connected to the GSM network signal strength readings are displayed in the communications history, and also graphically displayed in bar chart format.

The modem will act on any new messages as it receives them, and also check both the SIM and Modem memory for any buffered messages once every 10 minutes.

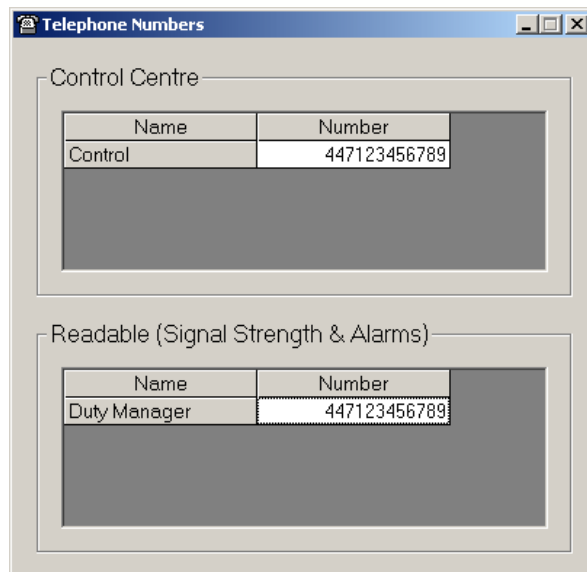
5.0 Storing Telephone Numbers

All required telephone numbers (for receiving logs, and signal strength checks) must be entered into the local database prior to setting up the Textlog.

To do this:

Select **'Setup'**, then **'Telephone Numbers'** from the menu bar, as shown below.

The following window is displayed:



'Control Centre' phone numbers are for Host control centre receiving telephone numbers.

'Readable (Signal Strength & Alarms)' phone numbers are for mobile phones used to receive alarm messages.

Telephone numbers can be edited by right clicking on the relevant table, and choosing the required option:

- Add Name & Number
- Edit Number
- Edit Name
- Remove Entry

Note: For all numbers (except special service centres such as 8xxx) use the international number convention e.g. 447xxxxxxxxx omitting the '+' symbol.

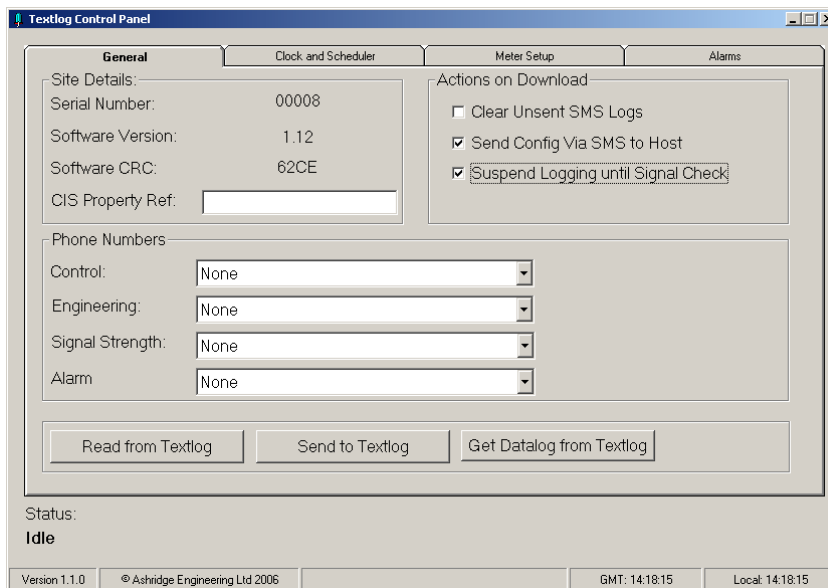
6.0 Configuring Textlog LC from PC

Prior to use the hardware must be configured with user settable schedules and telephone numbers.

Select 'Setup', then 'User Configuration' from the menu bar, as shown below.



The Textlog Control Panel is then displayed:



Connect the logger to PC by using the supplied 'Configuration cable' to the allocated RS232 port and press 'Read from Textlog', and follow the on screen prompts. The PC will communicate to the Textlog via the RS-232 Lead to upload the current settings, and display them on screen.

Note: Ensure that the Modem 2 is NOT active receiving messages to keep COMM port available for configuration

Once the current configuration has been successfully uploaded there are four panels available for user configuration.

6.1 General Setup

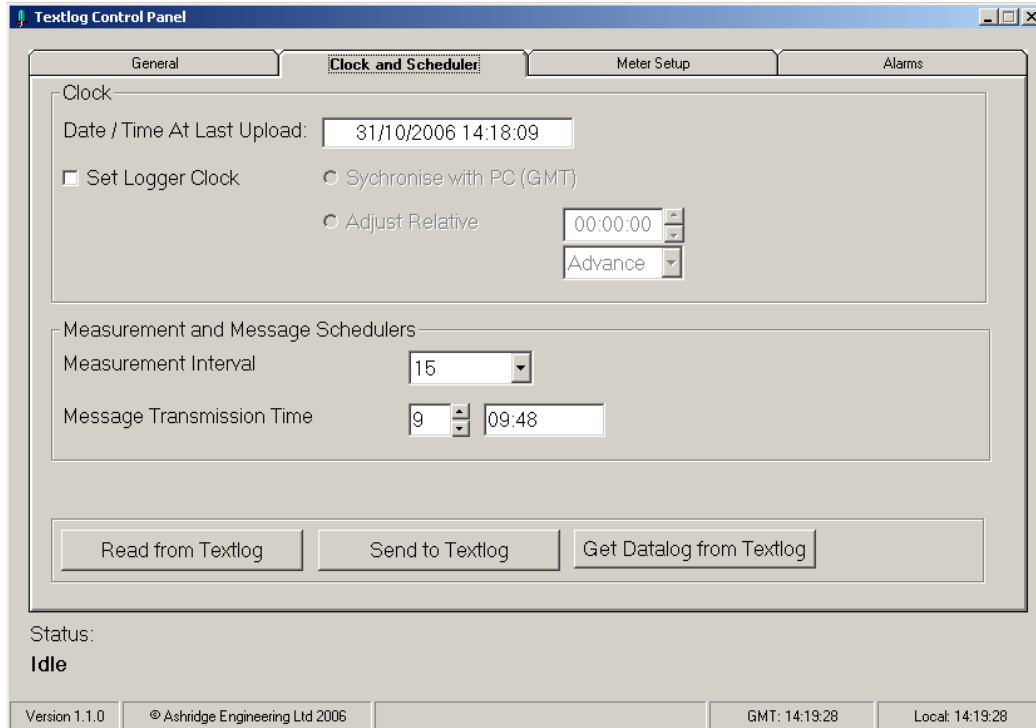
The screenshot shows the 'Textlog Control Panel' software interface. The window title is 'Textlog Control Panel'. It has four tabs: 'General', 'Clock and Scheduler', 'Meter Setup', and 'Alarms'. The 'General' tab is active. Under 'Site Details', there are fields for 'Serial Number' (00008), 'Software Version' (1.12), 'Software CRC' (62CE), and 'CIS Property Ref' (empty). Under 'Actions on Download', there are three checkboxes: 'Clear Unsent SMS Logs' (unchecked), 'Send Config Via SMS to Host' (checked), and 'Suspend Logging until Signal Check' (checked). Under 'Phone Numbers', there are four dropdown menus: 'Control' (None), 'Engineering' (None), 'Signal Strength' (None), and 'Alarm' (None). At the bottom of the main area are three buttons: 'Read from Textlog', 'Send to Textlog', and 'Get Datalog from Textlog'. Below the main area, the status is 'Idle'. The footer contains 'Version 1.1.0', '© Ashridge Engineering Ltd 2006', 'GMT: 14:18:15', and 'Local: 14:18:15'.

Site Details displays the Ashridge Serial number of the Textlog, Firmware Version, and Firmware CRC Checksum. The CIS property reference is to be entered here.

Phone Numbers is used to set the various telephone numbers for SMS to be sent. Control will receive all logs and configuration settings, Engineering will receive configurations only, Signal Strength is for the telephone number of the installer to receive a message confirming successful install, and Alarm is to receive human readable alarm messages.

Actions on Download is used for selecting any maintenance required
'Clear Unsent SMS Logs'
'Send Config Via SMS to Host PC'

6.2 Clock and Scheduler



'Date / Time At Last Upload' displays the most recent internal clock settings in the Meter Reader, when the internal settings were last uploaded.

To adjust the internal clock check **'Set Logger Clock'** and choose one of the following options:

'Synchronise with PC' will set the clock to the current windows PC settings, automatically corrected for daylight saving. For this option it is essential that the PC clock is correct, and daylight settings set appropriately. This option is only available for loggers connected via configuration lead.

'Adjust Relative' allows the internal clock to be adjusted forwards (advance), or backwards (retard). This is the only available method for remotely adjusting internal clocks.

'Measurement Interval' sets the logging interval to 1, 5, 10 or 15 minutes. The desired interval is chosen by selecting the value from the dropdown box.

'Message Transmission Time' sets the daily time for SMS logs to be transmitted. This is set by using the up / down arrow and choosing an hour, the minute is automatically chosen at random.

Note: The Current PC Clock, and GMT times are shown on the Status bar.

6.3 Meter Setup

The screenshot shows the 'Textlog Control Panel' window with the 'Meter Setup' tab selected. It contains two main sections: 'Meter A (Main)' and 'Meter B (Bypass)'. Each section has four fields: 'Totaliser Units' (a dropdown menu), 'Pulse Input' (a dropdown menu), 'Totaliser' (a numeric input field with a decimal point), and 'Serial Number' (a text input field). Below these sections are two buttons: 'Read from Textlog' and 'Send to Textlog'. At the bottom of the window, there is a status bar with the text 'Status: Idle' and a footer containing 'Version 0.0.1', '© Ashridge Engineering Ltd 2006', 'GMT: 09:19:46', and 'Local: 10:19:46'.

The Textlog LC is capable of having two pulse inputs; one for 'Main Meter', and one for 'Bypass Meter' The setup for each are identical.

'Meter Units' Select from the dropdown box the totaliser units of the meter being logged.

'Pulse Input' Select from the dropdown box the correct pulse input for the sensor used on that channel.

'Totaliser' Enter the current totaliser reading of the meter being logged.

'Serial Number' Enter the serial number of the meter connected.

6.4 Alarms

The screenshot shows the 'Textlog Control Panel' window with the 'Alarms' tab selected. The window is divided into four sections: 'General', 'Clock and Scheduler', 'Meter Setup', and 'Alarms'. The 'Alarms' section contains two channels for configuration:

- Alarm Channel (Main Meter):**
 - Enabled
 - Set: LPS
 - Clear: LPS
 - Debounce:
 - Message:
- Alarm Channel B (Bypass Meter):**
 - Enabled
 - Set: LPS
 - Clear: LPS
 - Debounce:
 - Message:

At the bottom of the configuration area are two buttons: 'Read from Textlog' and 'Send to Textlog'. Below the configuration area, the status is shown as 'Idle'. The footer of the window contains: 'Version 0.0.1', '© Ashridge Engineering Ltd 2006', 'GMT: 09:20:08', and 'Local: 10:20:08'.

The Textlog LC is capable of having one alarm set per channel. The alarms are triggered if the flow rate has exceeded the set value for the required time period. If an alarm is triggered a fastlane reading will be initiated and a text message send to the mobile phone number set.

‘Enabled’ Tick this box to enable alarm on that channel.

‘Set’ The value in litres per second for triggering alarm condition.

‘Clear’ The value in litres per second for clearing alarm condition.

‘Debounce’ The time that the ‘Set’ value must be met before alarm is triggered. This can only be multiplies of the logging interval.

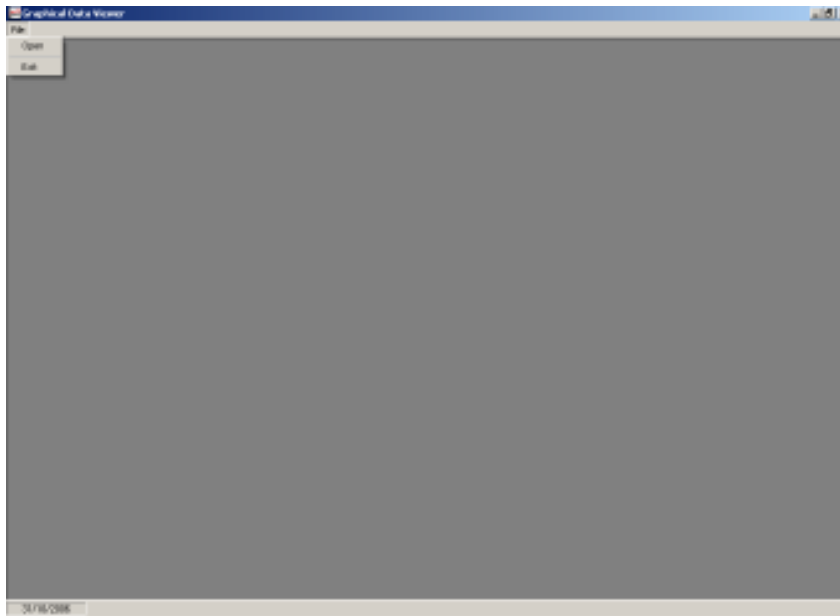
‘Message’ Enter the message to be displayed on the receiving mobile phone.

7.0 Data Viewer (PC Only)

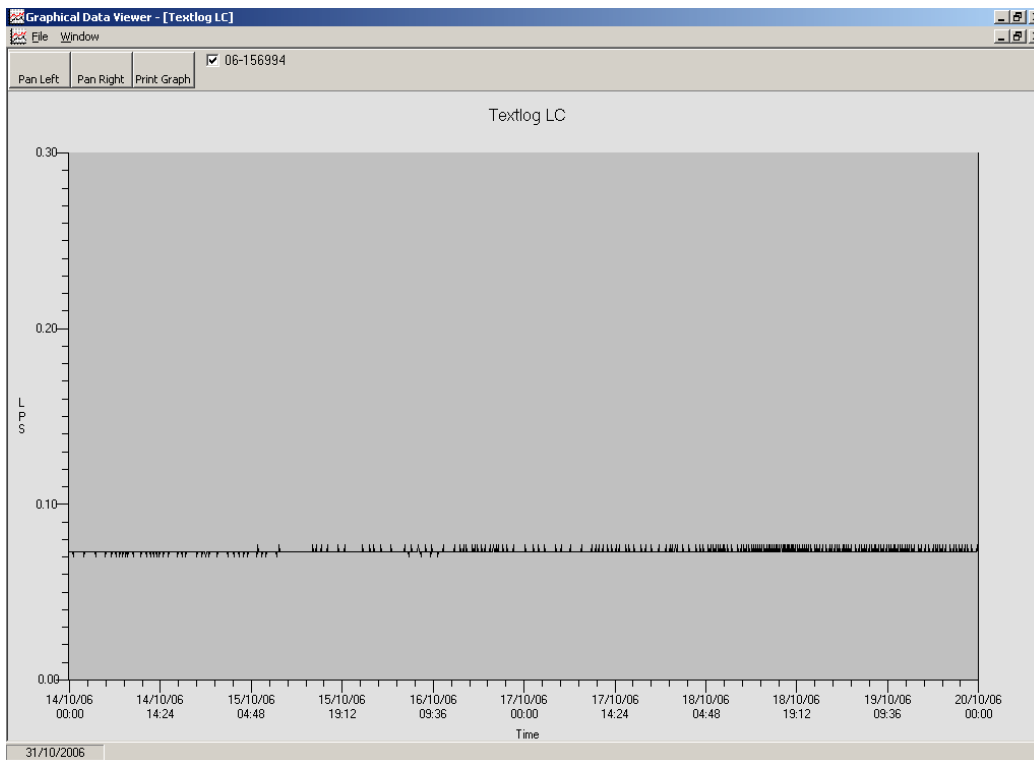
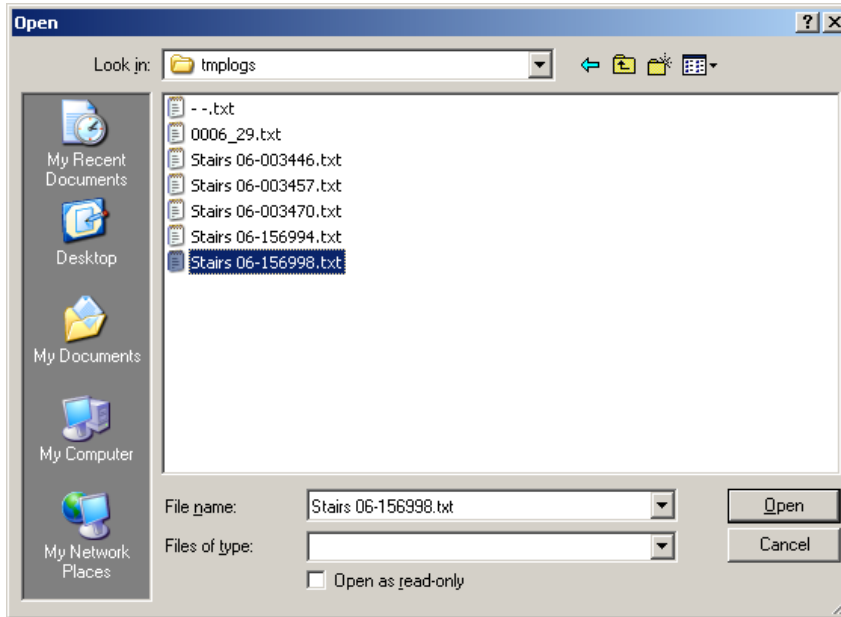
Load 'Graph Viewer'



From 'Graph Viewer' select 'File' then 'Open'



Select the file to be opened



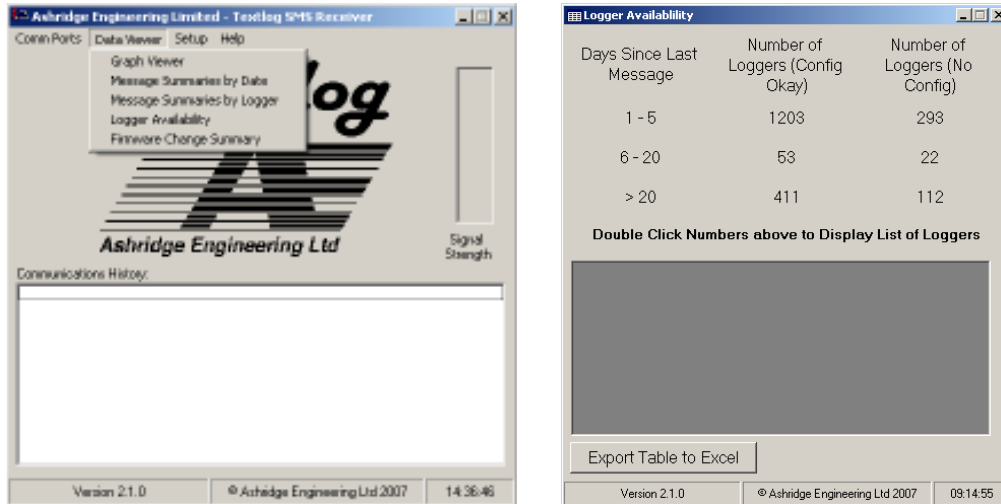
To Add Extra data series choose 'Add' from the File Menu.

It is possible to turn data series 'on' and 'off' by clicking the checkboxes at the top of the screen

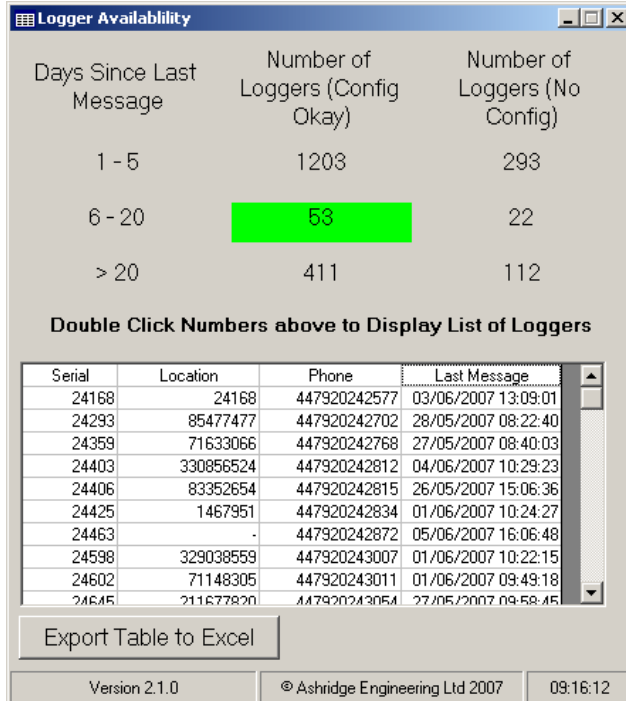
Right Click on the graph for scaling options

8.0 Displaying Logger SMS Availability

By selecting 'Logger Availability' from the 'Data Viewer' menu it is possible to display a table detailing the number of loggers reporting in set time periods (1 to 5 days ago, 6 to 20 days ago, and greater than 20 days ago).



To display a list of actual loggers contained within the specific time period double click the resulting number and a list will be displayed. By clicking the 'Export Table to Excel' button the list will be automatically transferred to a new Excel worksheet.



8.0 Configuring Textlog LC from PDA

There is a separate program supplied to enable configuring of Textlogs by using PDAs.

On launching the software the following screen is displayed:

Textlog 10:48 ok

Textlog

Clear Unsent Send Config SMS

Suspend Logger until Signal Check

Property:

Control:

Engineering:

Signal:

Alarm:

General | Clock | Main | Bypass | Log

Read from TL Send to TL Utils

Before continuing ensure the correct serial port for communicating with the Textlog is selected in the '**Utils**' menu.

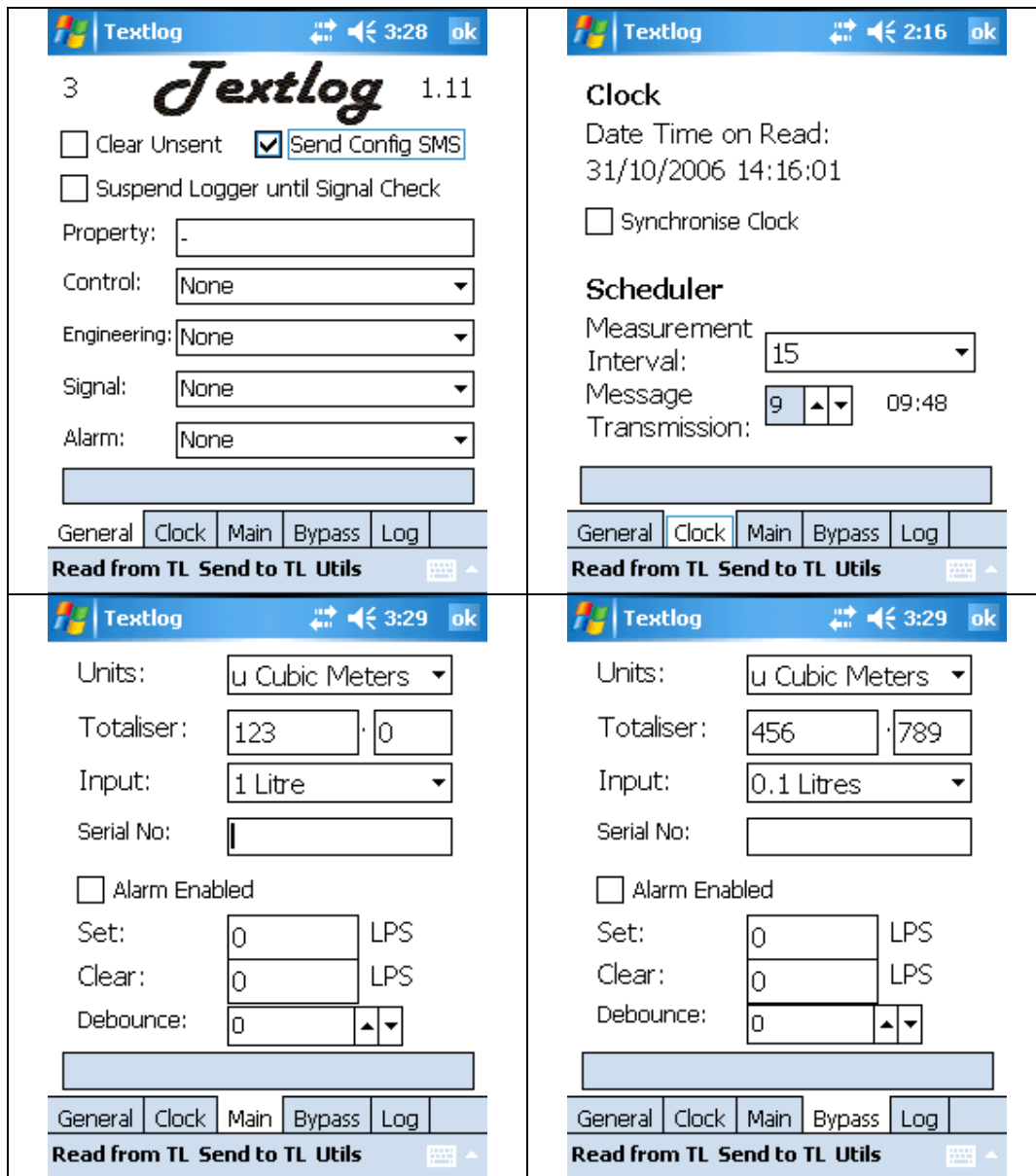
To enable the correct lookup of telephone numbers copy the following files from the PC configuration program to the PDA:

C:\Ashridge\Textlog\Telephone\hosts.csv

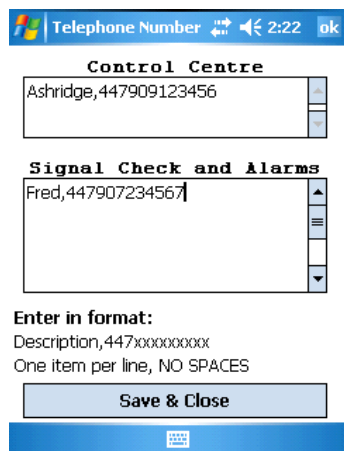
C:\Ashridge\Textlog\Telephone\alarms.csv

Once the Textlog is connected to the PDA select 'Read from TL'. The current settings will be read from the Textlog and displayed on screen.

The four tabs contain setting for all sections of the logger in a similar layout and organisation to the PC configuration program



Once the required settings are altered on screen choose the ‘Send to TL’ option and wait for the operation to complete before disconnecting the Textlog from the PDA.



To Edit the local phonebook of telephone numbers choose ‘Phone Numbers’ from the ‘Utils’ menu and edit the numbers as shown.

10.0 Remote Configuration

Remote Configuration is used for sending SMS messages back to the Textlog to change their settings, such as phone numbers, adjust clock, and schedulers.

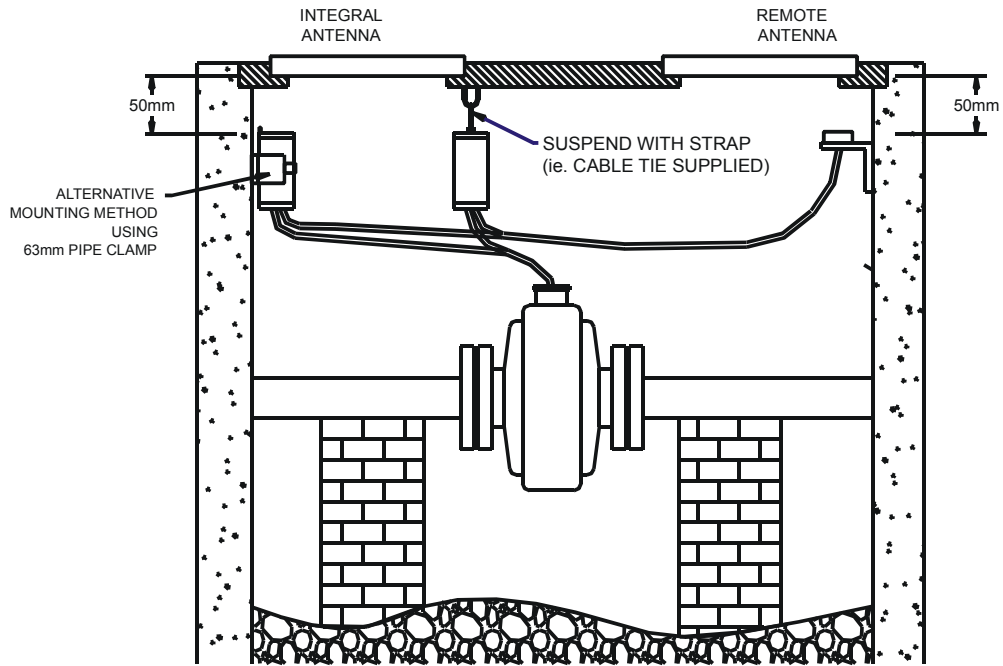
By choosing the 'Setup', 'Remote Configuration' menu, then selecting the required logger or entering the logger serial number it is possible to view the latest settings as held in the lookup file.

All settings can be changed via remote configuration with exception of the Clock which can only have a correction value (forward or reverse) sent.

To send new settings click the 'SMS to Textlog' button, and SMS messages will be send to the Textlog, which will pick up the messages on its next scheduled send or receive and then act upon the new commands and automatically send a copy of the new settings back to the control and engineering computers.

The local lookup of settings does not get updated until the configuration message is returned from the Textlog.

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INSTALLATION