



# **S2aWin Help On-Line User Manual**

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**On-Line User manual**

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*by Martin Saville*

*Revision : 1.0*

# S2aWin Help

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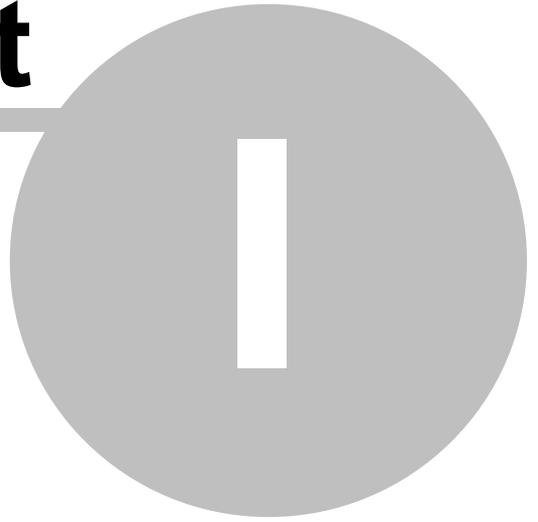
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**Getting Started**

**Part**

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# 1 Getting Started

## 1.1 Installing S2aWin

### Installer

S2aWin is installed from a single executable file which contains the installer and Program files. This is called Setup.exe.

To install S2aWin simply run Setup.exe and follow the prompts. The installer will default to installing S2aWin in the folder C:\Program Files\S2aWin but gives you the option to install it in a different folder if you desire.

When installation is complete you will have an S2aWin item under Programs on the Start Menu and an S2aWin Icon on the Desktop.



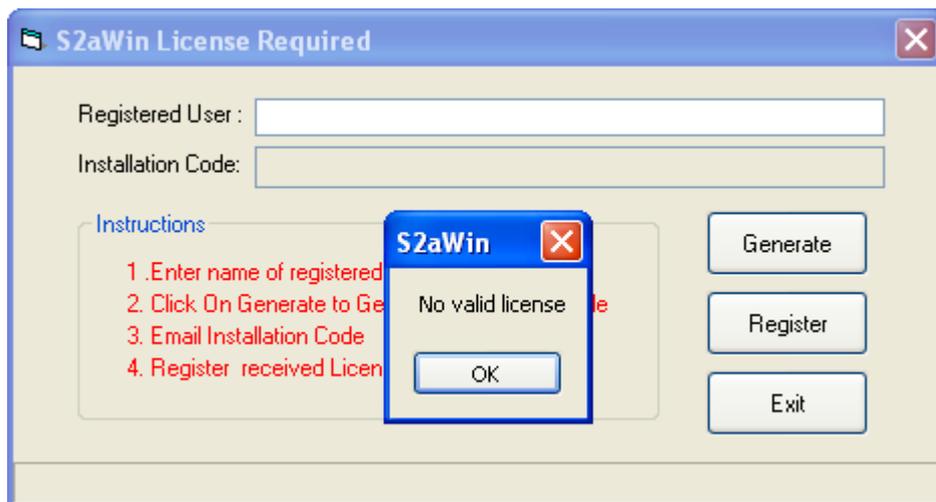
### Windows 98 vs NT4/2000/XP

Please note that there are currently two versions of S2aWin installer, one for Windows 98 and another for Windows NT4, 2000 and XP. The installer will detect the version of Windows you are using and only install on the correct platform. The reason for this is that some of the Windows dll's that are installed as part of the VB run-time Visual Basic installs are specific to a Particular Operating System.

## 1.2 New Installation

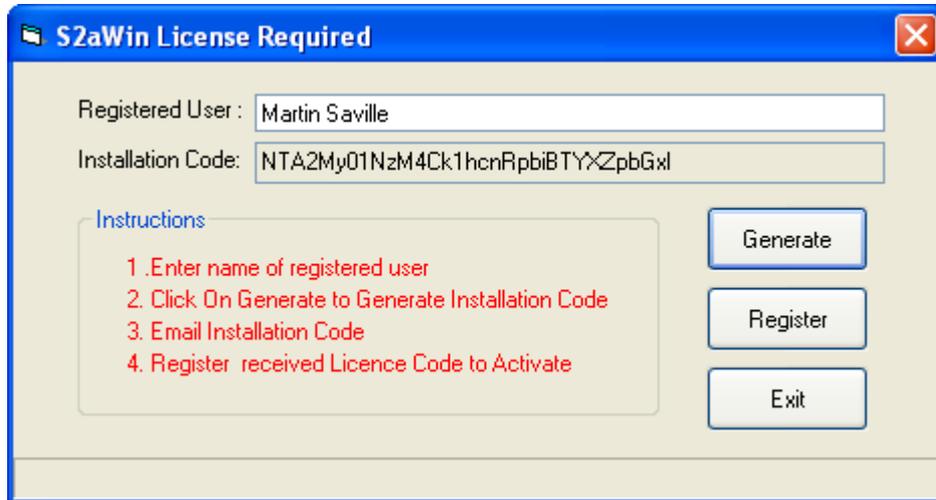
If you are performing a new installation, the first time that S2aWin starts it will not detect a valid license (Demonstration or Permanent). This is normal behaviour.

When you start the program it will present you with a warning saying No Valid License. Click on OK.



Enter a name under the Registered User text box. This will be the name to which your software will be licensed so if you are purchasing the software for a company it is better to enter the Company name rather than your own.

Click on Generate and you will see that an installation code is generated. Cut and paste this code into an email and send it to your software vendor.



In due course you will receive a very long liberation code back. Click on Register and cut and paste this code from the email into the box as shown.



Click on Register and you should get a message box saying that you have successfully registered the product. The same applies whether it is a demonstration license or a full license.



If the Licence is a Demonstration License you will see a splash screen for 5 seconds each time you start the software. This will also inform you how long is remaining of your demonstration period.



If it is a full license you will not see the splash screen and the software will start up straight away.

## 1.3 Upgrade Installation

### Upgrade within a Major Version

e.g. from 2.0.0 to 2.1.0

Follow the same procedure for an upgrade installation.

Existing License information will be unaffected so long as the upgrade.

### Upgrade across Major Versions

e.g. from 2.x.x to 3.x.x

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Follow the same procedure as for a new installation however existing license will no longer be valid and you will need to purchase a new licence.

## 1.4 The Registration System

The Licensing system is keyed to various parameters which identify your particular PC hardware. This means that the license for one PC will not work on another PC.

When first installed the User generates a unique Installation code which is related to the hardware the software is installed on and the User Name entered. This is emailed to the vendor who creates a liberation code which is entered into the software to activate either a demonstration license or a full license.

When registered the software will create a Licence file called S2aWin.LIC in the application folder. This contains the license information some of which is encrypted. If the user attempts to hack this file to alter license information, it is detected by the software and it will cease to function.

The user is free however to backup this file and in case of a system crash, in which case so long as exactly the same hardware is utilised, the license can be restored by simply copying the S2aWin.Lic file back into the Application folder.

**S2aWin  
Functions**

**Part**

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## 2 S2aWin Functions

### 2.1 Main Console

When S2aWin starts it will display the Main Console. From this screen all major functions of the program are selected.

Key functions are

- [Read Registers](#)
- [Configure Meter](#)
- [Read profile](#)
- [Program Settings](#)
- [License Maintenance](#)
- On-Line Help System



## 2.2 Read Registers

Read Registers reads the Meters Registers. These can be read in two modes, Single Shot and Continuous.

**Single Shot** mode will perform a single read sequence of all the registers. If Log Reads is "ON" the register Snapshot will be appended to the daily read file. This is a CSV format file which may be easily imported into Excel if required. The File is called Registryyyymmdd.txt and by default is stored in a folder called 'Read' under the application folder. The location where the file is stored may be changed under the [Program Options](#) menu. This is also where Logging of reads is enabled.

**Continuous mode** cycles through the all the registers once approximately every 2 seconds. This is useful where continuous monitoring is required. Readings cannot be logged in Continuous mode.

The Stop button becomes active when continuous mode is activated. Clicking on 'Stop' will cease continuous reading at the end of the next reading cycle (i.e there may be up to 2 seconds delay from clicking on Stop to reading ceasing).

**Reset Reverse Flag** If reverse energy has been detected by the S2A meter it sets a flag in software and an annunciator on the LCD display to alert the meter reader. This will show up under 'Status' when the meter is read with S2aWin. The Reverse flag can be reset by clicking on the button on this form.

**Registers** Are displayed to the maximum available resolution of 1 Wh.

**Current Time on Power** Is the time since the last power restoration

**Total Time on Power** is the Total time the meter has been powered up since manufacture (to the nearest 4 hours).

Read S2A Registers

Help

Meter

Serial: 691995    Model: S2A    F/W: V5.0

Log Reads: ON

Registers

Total

Forward: 01864.883

Reverse: 00000.000

Rate 1: 01864.010 <- Active

Rate 2: 00000.873

Rate 3: 00000.000

Rate 4: 00000.000

Status

Reverse Flag Set

EEPROM Error

Configuration Checksum Error

Energy Register Corrupt

Read

Single

Continuous

Stop

Reset Rev Flag

Clear Form

Exit

Current Time on Power

Days: 86    Hours: 00    Mins: 56    Secs: 06

Total Time On Power

Days: 462    Hours: 12

Signed Off

## 2.3 Configure Meter

The Option is used to

- Load a Meter Configuration stored on disk
- Write a Meter Configuration to disk
- Read a Meter configuration from a Meter
- Write a Meter Configuration to a Meter
- Create a new Meter Configuration
- Edit a Meter Configuration

**Load Defaults** Loads a default Configuration into memory

**Load and Save** is used to read saved configuration files from disk and write configuration files to disk.

**Read and Write** is used to read a configuration from a meter into memory where it can be edited, printed or saved to disk. Write is used to write a configuration in memory to a meter.

**Tariff in Memory** displays the name of a Configuration read into memory from a disk file.

**Configuration Description** The user may enter a description for a configuration which will be save and read back as part of a configuration file.

The Meter Configuration is broken into three Tabs on a Tabstrip.

- [General](#)
- [Startup Display](#)
- [Normal Display](#)

### 2.3.1 General

The General Tab is where parameters which are not related to the display are configured.

**Config ID** is an optional 5 digit numeric ID

**Meter Type** select from S2A and S2AS. S2AS may also program S2AT versions of the S2A but the S2AM has a totally different protocol and is not currently supported.

**Suppress Leading Zeros** If checked Leading zeroes on the LCD display will not be shown.

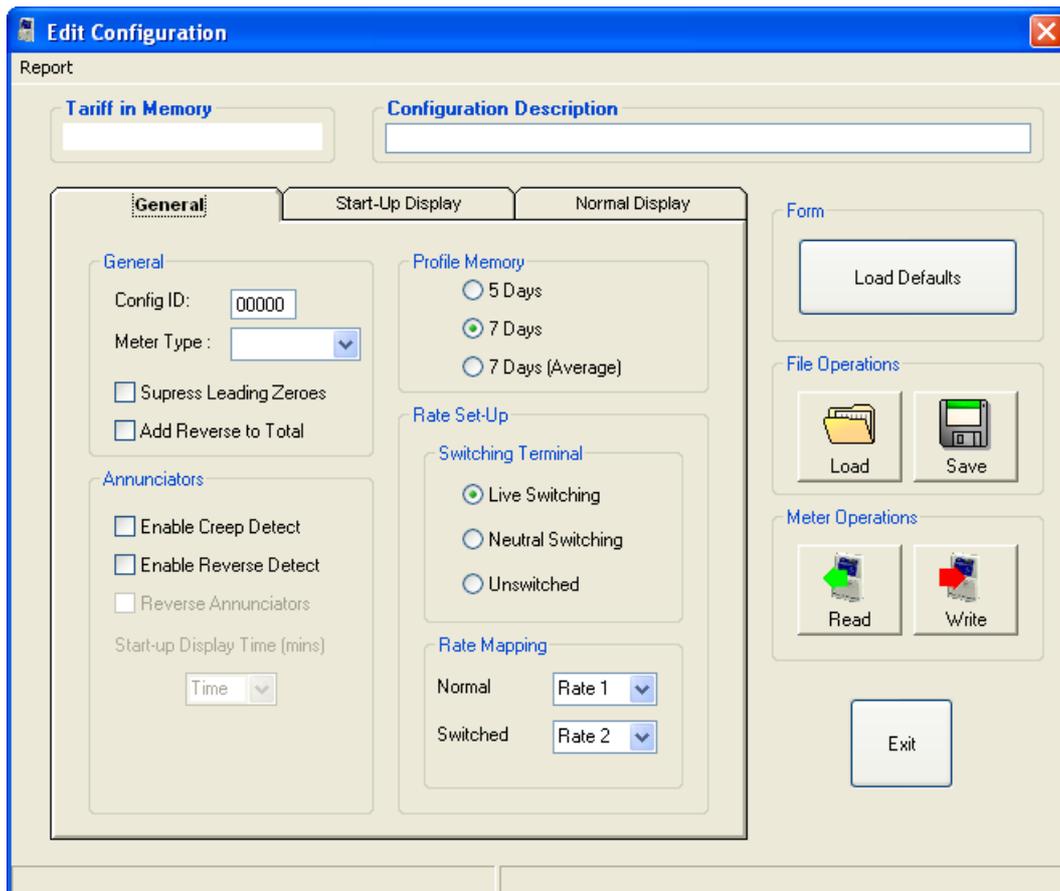
**Add Reverse to Total** If this is checked, Power measured in the reverse power register will be added to the Forward Total Register as well as being recorded separately. Only the forward register can be displayed on the LCD display.

**Profile Memory** Select 5 days, 7 days or 7 days averaged. 7 days averaged records the pseudo average power on the previous 8 weeks. The formula for calculating this is

Current Stored Value = Present Stored Interval + (Current Interval / 8)

**Switching Terminal** Live, Neutral or Unswitched selects whether the Two Rate terminal is switched by 230V or Neutral or whether it is unswitched (Not used).

**Rate Mapping** Defines the Switched Rate. 'Normal' is the rate selected when the rate switching terminal is inactive. 'Switched' is the rate selected when the Rate Switching Terminal is Active



### 2.3.2 Startup Display

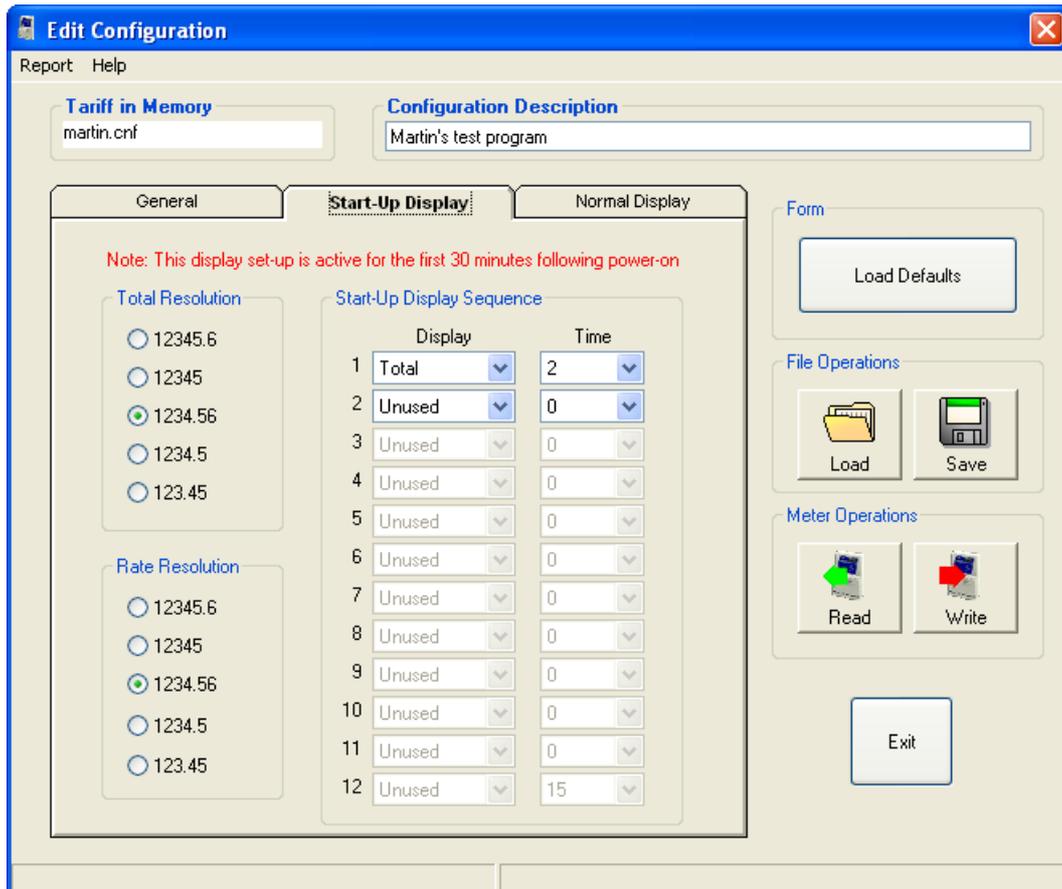
The Meters **start-up** display is shown for the first 30 minutes after Power is applied to the meter.

**Total Resolution** Sets the number of whole digits and decimals displayed on the meter display for the Total Register.

**Rate Resolution** Set the number of whole digits and decimals displayed on the meter display for any displayed Rate registers.

**Start-up Display Sequence** sets the sequence in which predefined displays will be shown and the time a display is active before the next display is shown.

At least one display must be shown. If any display is set to unused all displays in the sequence with a higher sequence number will also be set to unused.



### 2.3.3 Normal Display

The Meters **Normal** display is shown 30 minutes after Power is applied to the meter.

**Total Resolution** Sets the number of whole digits and decimals displayed on the meter display for the Total Register.

**Rate Resolution** Set the number of whole digits and decimals displayed on the meter display for any displayed Rate registers.

**Start-up Display Sequence** sets the sequence in which predefined displays will be shown and the time a display is active before the next display is shown.

At least one display must be shown. If any display is set to unused all displays in the sequence with a higher sequence number will also be set to unused.

**Edit Configuration**

Report Help

**Tariff in Memory**  
martin.cnf

**Configuration Description**  
Martin's test program

General Start-Up Display **Normal Display**

Note: The Normal Display takes effect 30 minutes after Power-On

**Total Resolution**

12345.6  
 12345  
 1234.56  
 1234.5  
 123.45

**Rate Resolution**

12345.6  
 12345  
 1234.56  
 1234.5  
 123.45

**Normal Display Sequence**

	Display	Time
1	Total	2
2	Rate 1	2
3	Rate 2	2
4	All on Test	1
5	Blank Test	1
6	Unused	0
7	Unused	0
8	Unused	0
9	Unused	0
10	Unused	0
11	Unused	0
12	Unused	15

**Form**

Load Defaults

**File Operations**

Load Save

**Meter Operations**

Read Write

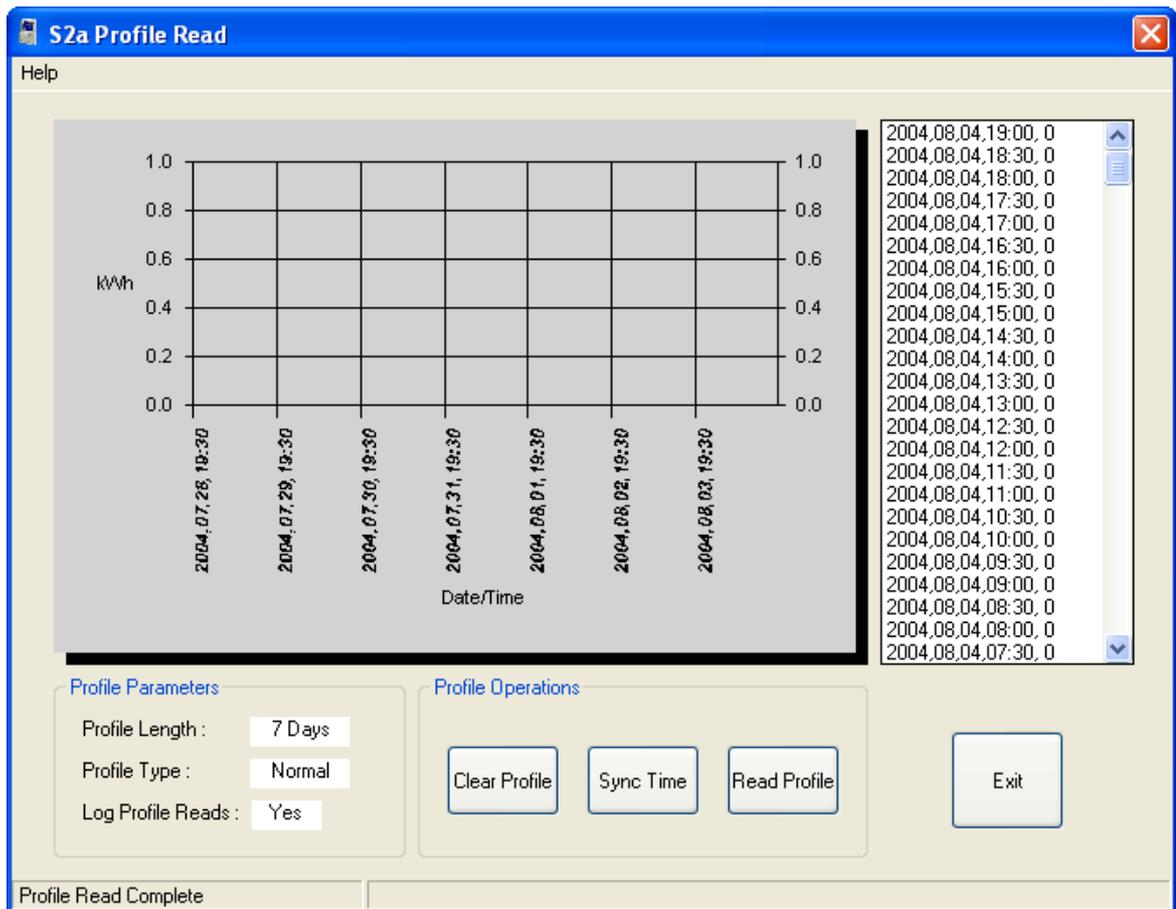
Exit

## 2.4 Read Profile

**Read Profile** Reads the 30 minute profile data from the Meter. Since the meter writes two 30 minute intervals every hour, the Meter must have been powered up for at least 1 hour before any profile data will be available. Available Profile data will be graphed and listed in text format. If Profile logging is enabled under [Program Options](#) data will also be stored in a csv file with the format Profile<Serial #> Date.txt

**Sync Time** will sync the Meters internal minutes and seconds to real-time.

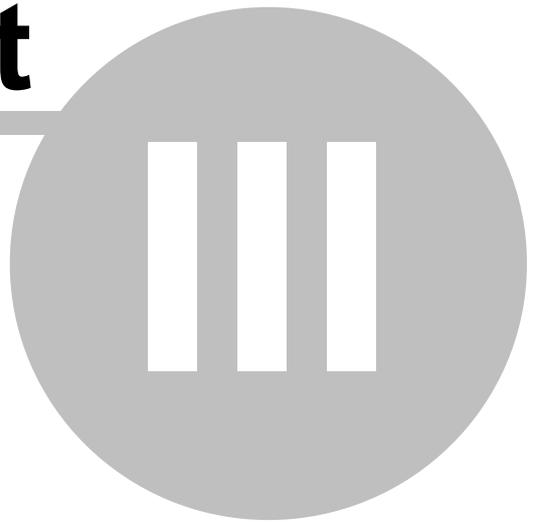
**Clear Profile** will attempt to clear the existing profile data in the meter.



# Program Configuration

## Part

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## 3 Program Configuration

### 3.1 Program Options

#### File Paths and Options

Allows the user to enable or disable logging of Register Reads, Profile data and configuration changes.

Also sets the path for storage of register read, Profile data, configuration files and config change files. You must browse to a valid folder. Free text entry is not permitted.

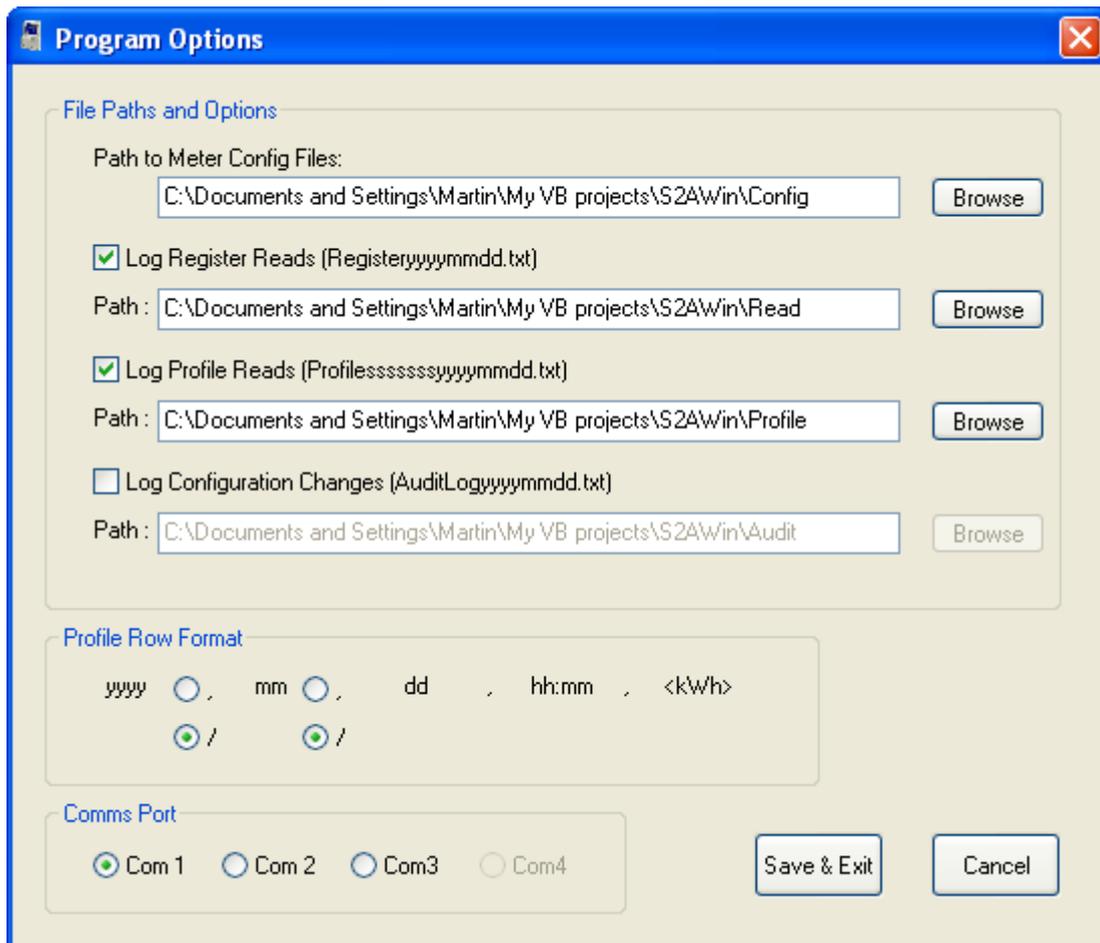
#### Profile Row Format

This allows the user to configure how the year, month and day are formatted in the Profile data file which may make it easier to graph the data.

#### Comms Port

Allows the User to choose from available comms ports which one is used for the IEC1107 Optical probe.

**Save and Exit** Once changes have been made you must save these by clicking on **Save and Exit**.

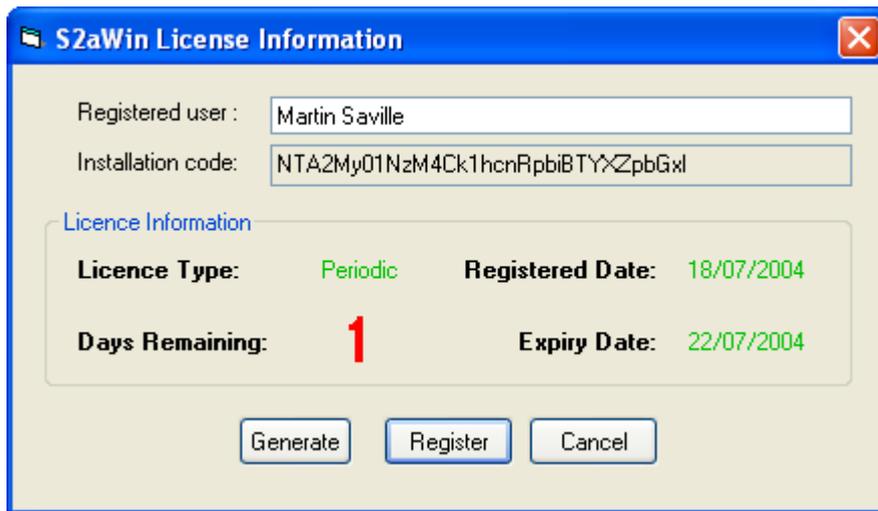


## 3.2 License Maintenance

This screen displays license information.

If the software is on a demonstration license it is possible to change the registered user and generate a new installation code prior to a permanent registration. Once the software has been permanently registered it is not possible to change the registered user.

This is also where the user can register the software.



The image shows a Windows-style dialog box titled "S2aWin License Information". It contains the following fields and information:

- Registered user : Martin Saville
- Installation code: NTA2My01NzM4Ck1hcnRpbjBTYxZpbGxl
- Licence Information**
  - Licence Type: Periodic
  - Registered Date: 18/07/2004
  - Days Remaining: 1
  - Expiry Date: 22/07/2004

At the bottom of the dialog, there are three buttons: "Generate", "Register", and "Cancel".

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