

GPRS Operation Manual

Web Browser & Calendar Creation Guide

For use with Simmonsigns GPRS PULSA Revision 2

1. TABLE OF CONTENTS

1.TABL	E OF C	ONTENTS	2
2 INTRO	DUCT	10N	3
	2.1	Summary of Operation	3
	2.2	Summary of Web Site Operation	4
	2.3	Manual Structure	4
	2.4	Web Site Navigation	5
	2.5	Common Tasks	6
	2.5.1	To Set up a GPRS Pulsa site	6
	2.5.2	To Send a Command Direct from the Website	6
	2.5.3	Commands available	7
	2.5.4	To Check Function	8
3 OPER	ATION	9	
	3.1	Logging In	9
	3.2	Main Menu Options	10
	3.3	Location Options Menu	11
	3.3.1	Location Details Entry	13
	3.3.2	Add New Sign	15
	3.3.3	Configure Alerts	17
	3.3.4	Save Changes	19
	3.4	Device Options Screen	19
	3.4.1	Sign Status	21
	3.4.2	Analyse Data	22
	3.4.3	Delete Sign	23
4 CALE	NDAR	MENU	24
	4.1	Calendar Menu	24
	4.1.1	Creating New Calendar	25
	4.1.2	Delete Calendar	27
	4.1.3	Calendar Creation	28
	4.1.4	Save Calendar	32
	4.2	Deployment Options Menu	32
	4.2.1	Send Calendar	34
	4.2.2	Retrieve calendar	35
E VCTIV	/ATIO	ALLISING TEVT MESSAGE	36

2 INTRODUCTION

This is the operator's manual for Simmonsigns GPRS Pulsa Version 1.0.020.

Simmonsigns developed the Simmonsigns GPRS Pulsa in response to requests from our customers. The development supplements the existing Simmonsigns Pulsa product range and simplifies the operation and programming of the GPRS Pulsa unit by using the internet via a Web browser. Popular features of previous products, for example the Simpod and magnetic swipe operation of Pulsa have been retained.

2.1 Summary of Operation

Figure 1 below illustrates the component parts of the Simmonsigns GPRS Pulsa.

The Website provides convenient means to control locations, set up GPRS Pulsa units, create switching regimes, download calendars and obtain status information for each GPRS Pulsa on the network. System details are retained within an online database that can be accessed by the browser application.

Calendars are downloaded from the web site to the GPRS Pulsa unit over the GPRS network. In routine operation the GPRS Pulsa uses the downloaded calendar to control illumination. The GPRS Pulsa can also be controlled using text messaging (over the SMS network) to turn on and off but note this does not override the calendar operation.

The GPRS Unit reports to the Web Site every 15 minutes and updates status, diagnostic and operating information for examination by the user. In addition, the user can receive text message and email "Alerts" of selected operational information or fault conditions.

As is common with many unattended systems, the GPRS Pulsa unit will automatically reboot at preset intervals. The Pulsa unit will reboot at 7.07am every day and if a time reference is available from the GSM network provider the internal time clock will be checked and corrected if required. Using the GPRS network modem firmware upgrades can be completed over the air without a site visit or further intervention from the user.

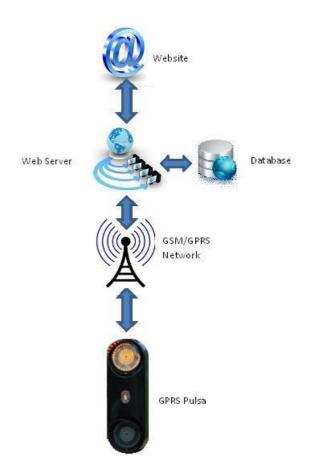


FIGURE 1 GPRS PULSA SYSTEM

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The key features and benefits of the Simmonsigns GPRS Pulsa unit are:

- Operation of switching patterns by calendar allows uploading of up to 2 years of calendars in advance.
- Immediate operation from within the Web browser via SMS text messaging
- Confirmation of operation by text message and email
- Remote fault reporting
- GPS system showing site location on Google maps.
- A battery back-up modem to allow warning of power failure to the GPRS Pulsa unit.

Benefits of a browser-based system.

- No bespoke software to install.
- No dial up modem required modem.

- It can be operated from a variety of web browsers.
- Increased security
- It can be operated using a smartphone.
- Operation over the mobile phone network
 GPRS system gives wide coverage.
- All system details are retained within an online database accessed by the browser application.

To operate Simmonsigns GPRS Pulsa you will require: -

- Simmonsigns GPRS Pulsa or upgraded SMART Pulsa
- A SIM card (these can be obtained from Simmonsigns).
- Access to a Web browser
- An Internet connection
- Your username and password (these can be obtained from Simmonsigns).

2.2 Summary of Web Site Operation

The operating Web Site can be found at: -

http://gprs.simmonsigns.co.uk

Typing the above URL address in to a compatible browser will bring up the Security Checkpoint. Successfully entering a Username and Password will allow access to the main screen.

The web site has been tested and verified against the following browsers: -

- Internet Explorer TM 7, 8, 9
- Safari 5
- Mozilla Firefox 8, 9, 10, 11
- Opera 11
- The Web site is also compatible with browsers on iOS and Android.

2.3 Manual Structure

This manual is intended to be read in PDF format using the available links to forward to the relevant section.

Due to the dynamic nature of the menu system (i.e., menu items change according to screen or task) this manual will be structured according to screens, so the user can easily find the relevant manual section.

To assist the user common actions are summarised in section 2.5 Common Actions below.

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2.4 Web Site Navigation

Please note that traditional browser navigation buttons do not function correctly with this web site. If the back, forward or refresh browser buttons are used the user will be redirected to the Security Checkpoint screen.

To help navigate through the Web site this section contains some basic navigation tips.

The main menu is positioned at the top of the screen below the welcome message. This menu offers access to features for Locations, Calendars and Log Out.

User controls are in three principal areas: - the left-hand menu, the display screen link, and the right-hand menu.

Left Hand Menu

Selecting one of the above options will bring up a further menu on the left-hand side of the screen, underneath the main menu. This menu is context sensitive therefore to assist the user the content will change according to the activity undertaken. The menu always starts with a menu name (e.g., location options) and finishes with Close.

Display Screen Link

A link (shown in blue) can become available when a display screen is displayed. Clicking on the link typically brings up another menu or range of options.

Right Hand Menu

When presented with a list of sites or GPRS units or other data a further menu is available on the right-hand side of the screen.

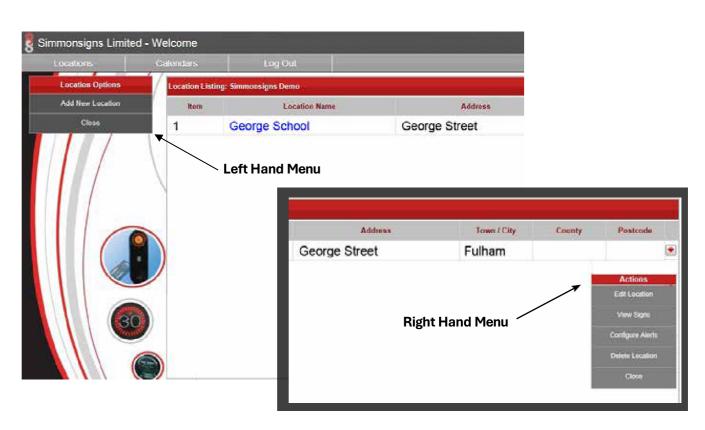


FIGURE 2 EXAMPLE SCREEN SHOWING THE NAVIGATION ELEMENTS

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2.5 Common Tasks

The Simmonsigns GPRS Pulsa is remarkably simple to operate. There are a few simple steps to set up a new GPRS Pulsa site: -

2.5.1To Set up a GPRS Pulsa site

To set up a new GPRS Pulsa site				
Action:	See section			
Log in	3.1 Logging In			
Set up the location	3.3.1 Location Details Entry			
Save the Location	3.3.4 Save Changes			
Add GPRS Pulsa units (signs) to the site	3.3.2 Add New Sign			
Create a switching pattern	4.1.1 Create New Calendar			
Create a calendar	4.1.4 Calendar Creation			
Send a calendar to the site	4.2.1 Send Calendar			

TABLE 1 SETTING UP A GPRS PULSA SITE

2.5.2 To Send a Command Direct from the Website

Send a command direct from the web site				
Action:	See section			
Log in	3.1 Logging In			
Navigate to the location menu	3.3 Location Options Menu			
Select the location to produce the device options menu and select a GPRS unit	3.4 Device Options Screen			
Select Send Command to send a command to the chosen GPRS unit	3.4.1 Send Command			

TABLE 2 SEND A COMMAND DIRECT FROM THE WEB SITE

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2.5.3 Commands available

Manual on (set between 1 to 90 mins)
Manual off
Hazard Mode (5 Days continuous)
Modem Reboot
Reset Board
Set clock
SET to 5 mins reporting
SET to 15 mins reporting
SET to Hourly reporting

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2.5.4 To Check Function

Check function				
Action:	See section			
Log in	3.1 Logging In			
Navigate to the location menu	3.3 Location Options Menu			
Select the location to produce the device options menu	3.4 Device Options Screen			
From the sign listing screen select sign status from the Right-Hand Side menu	3.4.3 Sign Status			

TABLE 3
CHECKING UNIT FUNCTION

3 OPERATION

3.1 Logging In

To log in to the GPRS Pulsa web site the user will require a username and a password. These can only be obtained from Simmonsigns. Please call 01952 293333 or email sales@simmonsigns.co.uk to obtain your username and password.

The Web Site is located at: -http://gprs.simmonsigns.co.uk

Typing the above URL address in to a compatible browser will bring up the Security Checkpoint. This is shown below.

Please note only the password is case sensitive.

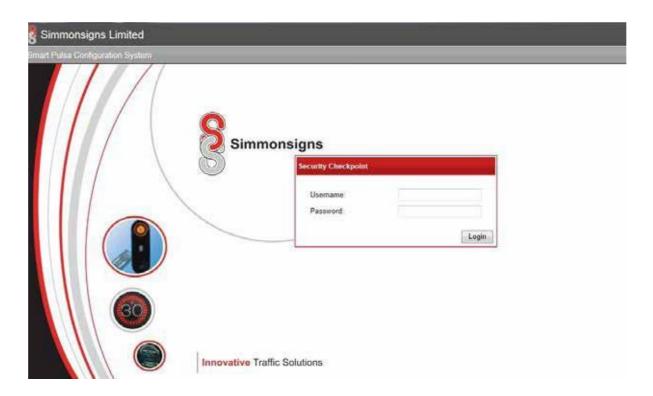


FIGURE 3
SECURITY CHECK SCREEN
THIS SCREEN PROVIDES SECURITY ACCESS CONTROL FOR THE WEB SITE

Successfully entering login details produces the following screen.

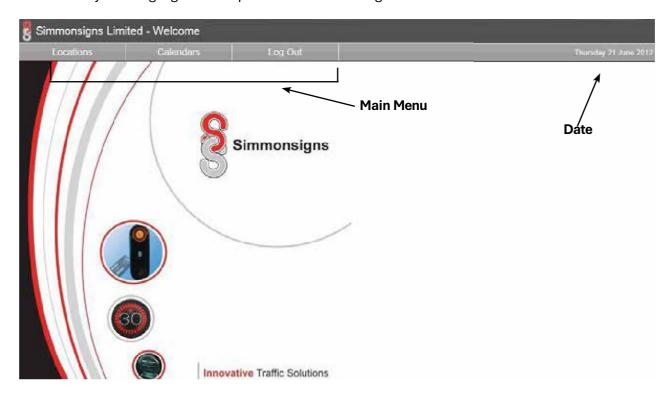


FIGURE 4
HOME SCREEN
THE USERNAME IS DISPLAYED IN THE BOTTOM LEFT-HAND CORNER

The user is identified in the bottom left-hand corner of the screen and the main menu options become available.

3.2 Main Menu Options

The main menu appears after logging in. The menu options offered from the home screen (horizontal menu) are:

Main Menu Screen						
Menu Item	Meaning	Link to Manual Section				
Locations	Shows a list of GPRS Pulsa locations in the display area and brings up the location options menu	3.3 Location Options Menu				
Calendar	Allows the user to create, select, manage, and deploy switching sequences to GPRS Pulsa systems.	4.1 Calendar Menu				
Log out	Back to log in screen					

TABLE 4 MAIN MENU

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3.3 Location Options Menu

Selecting Location from the main menu produces the location options screen. The table below provides links to the relevant section in the manual.

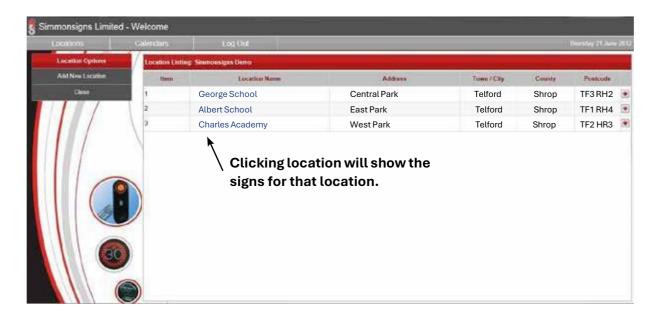


FIGURE 5 LOCATION OPTIONS SCREEN

From this position the user can access the options in table 5.

Location Options Menu			Display Area		Right Hand Side Menu		
Menu Option	Detail	Link to manual section	Detail	Link to manual section	Menu Option	Details	Link to manual section
9	Click to create a new location	3.3.1 Location Details Entry	Use the link displayed under the location name column to bring up the Device Options Screen	3.4 Device Options Screen	Edit Location	Forwards to the location options menu for editing	3.3.1 Locatio n Details Entry
Close	Return to the Main Menu / entry screen	3.2 Main Menu Options			View Signs	Produces a GPRS Pulsa listing for this location	3.4 Device Options Screen
					Configure Alerts	Produces the location alerts dialog for this location	3.3.3 Configure Alerts
					Delete Location	Following a confirmation request the selected unit will be deleted.	N/A
					Close	Return to the previous menu	N/A

TABLE 5 LOCATION OPTIONS TABLE

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3.3.1 Location Details Entry

The location options menu is used to create a new location or edit an existing sign.

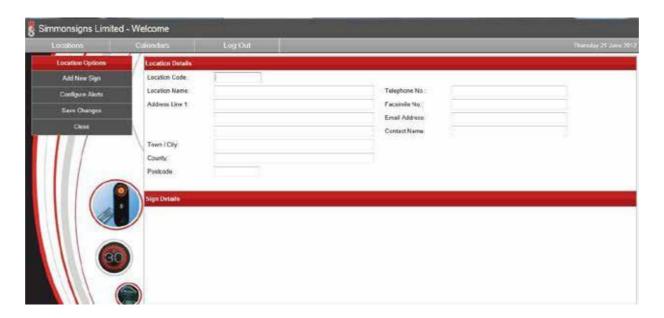


FIGURE 6
LOCATION DETAILS ENTRY FORM

The information entered in the Location Details table is: -

Location Details table						
Field	Meaning					
Location Code	A user generated code to represent the location. Can be used to group multiple signs to a location. Please note this field is mandatory and must be unique. Recommend Post code.					
Location Name	Name of the location. Please note this field is mandatory.					
Address Line 1	Address of the location					
Town City	Address of the location					
County	Address of the location					
Postcode	Address of the location					
Telephone No.	Telephone number for the person responsible for this location					
Facsimile No.	Fax number for the person responsible for this location					
Email Address	Email address for the person responsible for this location					
Contact Name	The name of the person responsible for this location.					

TABLE 6 LOCATIONS DETAILS TABLE

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Other options available from this screen are: -

Locations Options Menu			Display Area		Right Hand Side Menu		u
Menu Option	Detail	Link to manual section	Detail	Link to manual section	Menu Option	Details	Link to manual section
Add New Sign	Click to create a new device	3.3.2 Add New Sign	Enter information into the location details screen	3.3.1 Location Details Entry	Edit Location		3.3.1 Locatio n Details Entry
Configure Alerts	Brings up the Location Alerts Dialog	3.3.3 Configure Alerts	Select Link under Sign Alias to edit the GPRS Pulsa units	3.4.2 Add New Sign	View Signs		3.4 Device Options Screen
Save Changes	Committin g changes to the database	N/A			Configure Alerts		3.3.3 Configure Alerts
Close	Return to the location. options menu	3.3 Location Options Menu			Delete Location	Offers the opportuni ty to delete the location.	
					Close	Closes the menu	

TABLE 7 LOCATIONS OPTIONS SCREEN

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3.3.2 Add New Sign

This option allows the user to add a sign to a location. Selecting Add New Sign produces the following screen: -

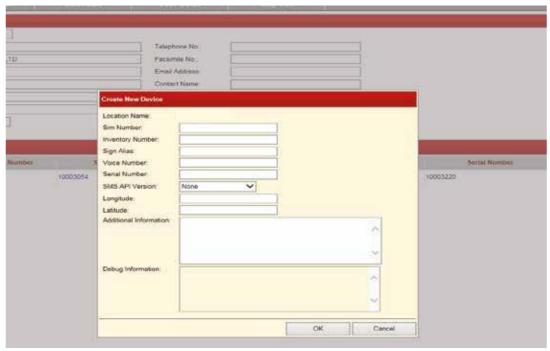


FIGURE 7
CREATE NEW DEVICE DIALOG BOX

The information has the meaning defined in the table below.

Creating New Device				
Field	Meaning			
Location Name	Automatically displays the name of the location. (Cannot be modified)			
SIM Number	SIM number from the SIM card.			
Inventory Number	Typically, the GAZ number of the Pulsa unit.			
Sign Alias	A local name for this GPRS Pulsa unit e.g., front of school			
Voice Number	Voice number that will be used by the SMS text messaging system.			
Serial Number	Will be supplied by the unit on connection			
API Version	Select the Application Programming Interface for the network you are using.			
Longitude & Latitude.	Allows the GPRS Pulsa to be geographically mapped so that it can be viewed on google maps.			
Additional Information	Any additional information can be stored here, e.g., this unit was installed on. 29th June 2012.			

TABLE 8
CREATE NEW DEVICE TABLE

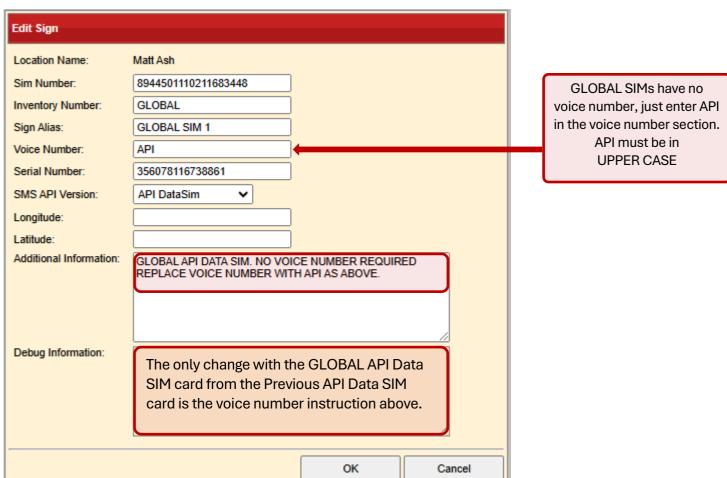
After entering data, selecting OK will save and the Location Option Screen will appear, and the sign will be assigned to the location.

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GLOBAL SIM Card sign creation information





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3.3.3 Configure Alerts

This option allows the user to set up the response of the individual GPRS unit to potential error conditions. The user can select to be informed of these conditions using SMS Text messages or email or both. Up to three addresses or numbers can be informed of each condition.

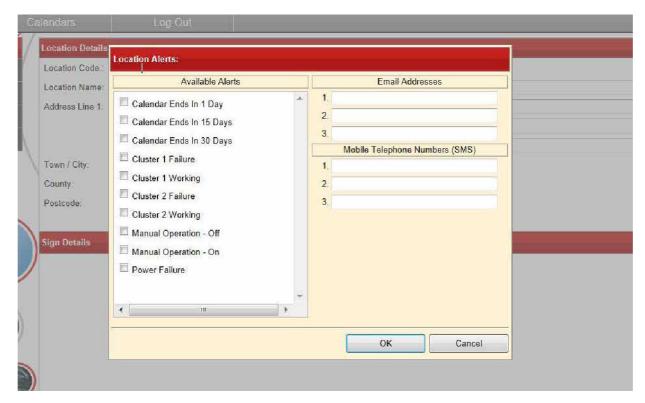


FIGURE 8
CONFIGURE ALERTS DIALOGUE

The alerts available are detailed in the table below.

Available Alerts				
Alert	Meaning			
Calendar ends in 1 day	Select this option to receive an alert 1 day from the end of a calendar			
Calendar ends in 15 days	Select this option to receive an alert 15 days from the end of a calendar			
Calendar ends in 30 days	Select this option to receive an alert 30 days from the end of a calendar			
Cluster 1 Failure	Select this option to receive an alert if lighting cluster one fails			
Cluster 1 Working	Select this option to receive an alert if lighting cluster one is functioning			
Cluster 2 Failure	Select this option to receive an alert if lighting cluster two fails			
Cluster 2 Working	Select this option to receive an alert if lighting cluster two is functioning			
Manual operation – On	Select this option to receive an alert if the unit has been switched on manually using the Website, Simpod, the magnetic swipe or text message			
Manual operation – Off	Select this option to receive an alert if the unit has been switched off manually using the Website, Simpod, the magnetic swipe or text message			
Power Failure	Select this option to receive an alert if the power to the unit is removed.			
Email Addresses	Enter up to three email addresses to receive email alerts			
Mobile Telephone Messages (SMS)	Enter up to mobile telephone numbers to receive text message alerts			

TABLE 9 ALERT SETTINGS

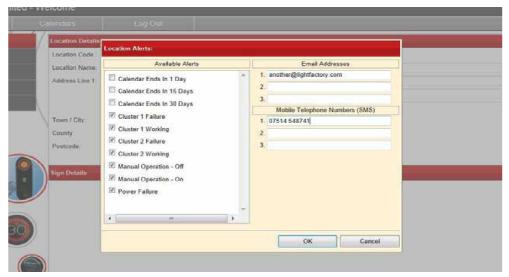


FIGURE 9
CONFIGURE ALERTS DIALOGUE COMPLETED

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3.3.4 Save Changes

Use the Save Changes menu option to make the changes to the database and save the changes.

3.4 Device Options Screen

The device options menu is displayed when a location has been selected. The menu offers options for communicating with individual signs within a location.

A typical device options screen is shown below: -

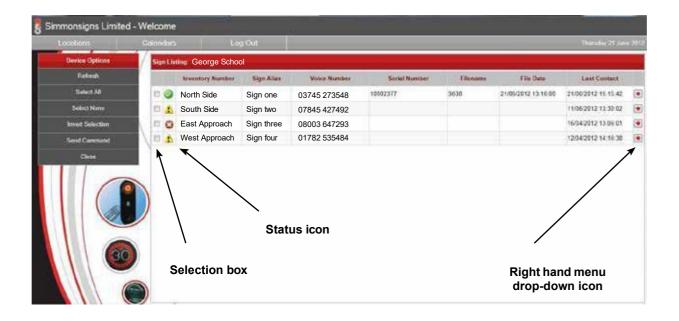


FIGURE 10 **DEVICE OPTIONS SCREEN**

Options available from the device options screen are detailed below.

Devi	ice Options M	lenu	Display Area		Right Hand Side Menu		I
Menu Option	Detail	Link to manual section	Detail	Link to manual section	Menu Option	Details	Link to manual section
Refresh	Refresh es the current display		Select Link under Sign Alias to edit the GPRS Pulsa units	3.4.2 Add New Sign	Edit Sign		3.3.2 Add New Sign
Select All	Fills in the tick box to select all items on the screen				Sign Status		3.4.3 Sign Status
Select None	Clears the tick box selection from all items on the screen				Analyse Data		3.4.4 Analys e Data
Invert Selection	Swaps the tick box selection from all items on the screen				Delete Sign		3.4.5 Delete Sign
Send Command	Allows comman ds to be sent to individua l units				Close		
Close	Return to the location. options menu						

TABLE 10 DEVICE OPTIONS SCREEN OPTIONS

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3.4.1 Sign Status

This option produces a report summarising the status of the selected GPRS units in a summary panel like that shown below.



FIGURE 11 DISPLAY OF SIGN STATUS

The summary panel produces a list of information representing a subset of the information that is available under the Analyse Data option. For an explanation of these items see Analyses data section later in the next section of this manual.

The communication status is displayed at the bottom of the dialog box, in the example shown the communication is shown as a green tick with the comment "The Sign is communicating as expected" which indicates correct operation.

3.4.2 Analyse Data

Selecting this option presents the user with detailed information relating to the selected unit. The screen containing this information is shown below:

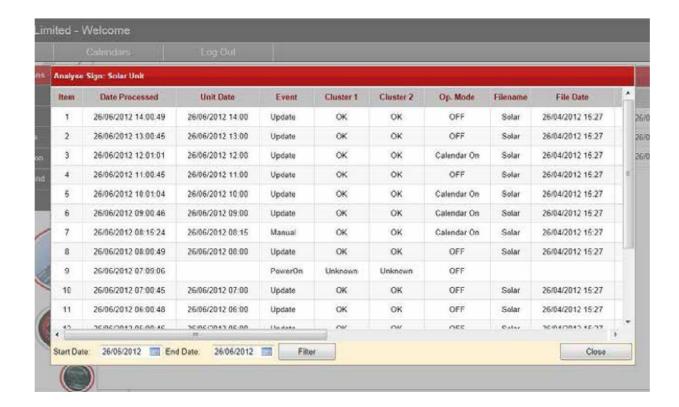


FIGURE 12 **EXAMPLE OF ANALYSE DATA SCREEN**

Using the start date and end controls to set filter conditions and then using the filter control button the user can acquire detailed information relating to the performance of individual units through a set time. This information is described in the table below.

	Analyse Data Fields					
Field	Field	Meaning				
Batt Status	_	Status of the battery backup in the GPRS modem				
	0	Battery not being charged				
	1	Battery is being trickle charged				
Pott Charge	2	Battery is being charged				
Batt Charge	421	Battery charge level				
		Indicates that the modem battery is fully charged				
	360 or below	Battery power is insufficient and will even stop reporting if the power. fails.				
GSM Reg.	Indicates the number of GSM networks the unit is registered on	One and above indicates that Pulsa is registered on at least 1 GSM network. Roaming Sims will unusually see five				
GPRS Reg.	Indicates the number of GPRS networks the unit is. registered on	One and above indicates that Pulsa is registered on at least 1 GPRS network. Roaming Sims will unusually see five				
Signal	Signal strength value	Above 6 normally indicates that the signal strength is strong enough for data transfer (Over 12 is recommended)				
Bit Error	0	Communication Ok				
	Non-zero	Indicates that there was an error in the data being transferred. Can show as an error if the signal is on the edge of working.				
Unit Date		The current time and date of the real time clock on the Pulsa Control board.				

TABLE 11 SEND COMMAND OPTIONS

3.4.3 Delete Sign

Following confirmation from the user this option allows the deletion of the chosen GPRS Pulsa unit.

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4 CALENDAR MENU

The Simmonsigns GPRS Pulsa system contains an on-board clock and calendar and an on-board set of ON/OFF switching times (known as switching patterns) to control the Pulsa. The ON/OFF switching times are set using the Web Interface and automatically downloaded to the GPRS Pulsa using the Internet and the GPRS Network.

Up to two years of switching sequences can be retained on-board on the unit, meaning the system can operate for up to two years without a communication link.

Switching patterns comprise of up to eight switching patterns each consisting of up to 5 blocks of ON and OFF switching sequences.

Switching calendars apply the switching pattern to a specific date. The Web-based system incorporates simple but powerful controls to allocate switching patterns to dates.

4.1 Calendar Menu

From the main menu select the Calendars option. This will produce a list of available calendars and new menu options in the calendar options screen: -



FIGURE 13 CALENDAR OPTIONS SCREEN

This screen offers the following options: -

Calendar Options Menu			Display Area		Right Hand Side Menu		
Menu Option	Detail	Link to manual section	Detail	Link to manual section	Menu Option	Details	Link to manual section
Creating New Calendar	Select to create new calendar	4.1.1 Create New Calendar	Link under Calendar Filename	4.1.1 Create New Calendar	View Calendar		4.1.1 Creating New Calendar
Send Calendar	This option brings up the Deployment Options Menu and allows the user to select a named Calendar and the GPRS Pulsa units to receive the calendar Use this	4.2 Deployment Options Menu			Delete Calendar		4.1.2 Delete Calendar
Retrieve calendar	option to upload a calendar from the selected GPRS Pulsa. Return to	4.2.2 Retrieve calendar			Close		
Close	the previous menu						

TABLE 12 **CALENDAR OPTIONS SCREEN**

4.1.1 Creating New Calendar

This option enables creation or editing of a switching pattern.

Note that to edit a calendar the user can click on the blue highlighted Calendar Name. This will bring up the switching pattern for editing. Follow the instruction below in the Switching Pattern Creation section to change or create a new switching pattern.

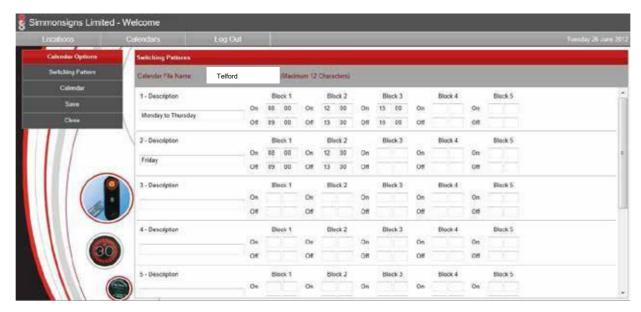


FIGURE 14 SWITCHING PATTERN CREATION

Instructions for creating a calendar: -

- Begin by entering a calendar name.
- Enter a name in the description field for the switching pattern.
- Enter ON and OFF times in the appropriate fields using a 24-hour clock format. Use the tab key to move easily between the boxes. NOTE: Times must be entered in sequence (early to later) for a single day, and the ON time must be earlier than the corresponding OFF time. If times are entered out of sequence the user will receive an error message.
- Periodically save the settings. As the data is stored within the database at the web server a good tip is to use the save when happy in case of loss of internet connection

Calendar Options Menu				Display Area		land Side
Menu Option	Detail	Link to manual section	N/A		N/A	
Switching pattern	This brings up this menu option					
Calendar	Allows switching patterns to be assigned to a calendar	4.1.7 Calendar Creation				
Save	Saves the switching pattern					
Close	Return to the menu					

TABLE 13 CALENDER OPTIONS MENU

4.1.2 Delete Calendar

Selecting this option allows the removal of a switching pattern. The user will be asked to confirm the operation prior to completion.

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4.1.3 Calendar Creation

Selecting Calendar from the Calendar Options menu allows the user to assign switching patterns to a calendar.

Selecting the Calendar option produces the following screen: -

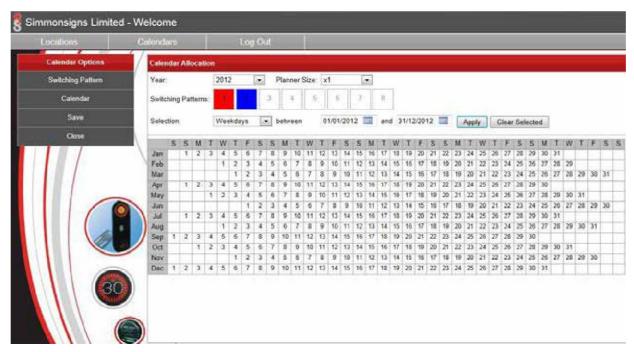


FIGURE 15 CALENDAR SCREEN

This screen features the controls detailed in the table below.

	Applying Calendar Screen						
Control	Detail	Meaning					
Planner	This is the displayed calendar	Dates can be individually selected by clicking or selected as groups using the controls described below					
Year	Cutonau	Allows the user to select the year in which the calendar will be applied.					
Planner size		Can select up This is an aid to visibility and allows the user to change the size of the displayed calendar (Planner). If the calendar becomes too big for the screen, then scroll bars will become visible, which will enable the user to move around the calendar.					
Switching Patterns		Allow confirmation and selection of the switching pattern. Available switching patterns will be coloured. Figures xx above shows that only one switching pattern has been created as only the first box is highlighted. In this instance the box is highlighted in red.					
Date Selection	Day Control	This allows easy selection of types or groups of days. For example, the user can select Mondays or Weekdays as a group to set up.					
Control	Calendar Start	Coupled with the Calendar End Control this provides limits to the start.					
	Control Control	and stop date of the selection in the Calendar. Coupled with the Calendar Start Control this provides limits to the start. and stop date of the selection in the Calendar.					
	Apply	Use this control to highlight the dates selected using the Date Selection Controls.					
	Clear Selected	Use this control to clear from the selection the dates selected. This uses the Date Selection Controls to determine which dates are cleared. Tip it can be easier to select those dates not					

TABLE 14 APPLYING CALENDAR SCREEN

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Setting the calendar dates and clicking the Apply control results in the days set by the date controls becoming selected and highlighted grey to show the selected dates.

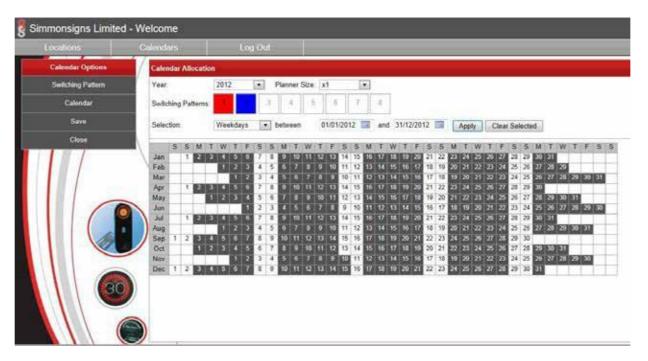


FIGURE 16
CALENDER DATES SET AND APPLIED

The user can then apply a switching pattern to those dates by clicking on the switching pattern control to select the appropriate switching pattern. As shown in the figure below the highlighting changes from grey to indicate the switching pattern that has been applied.

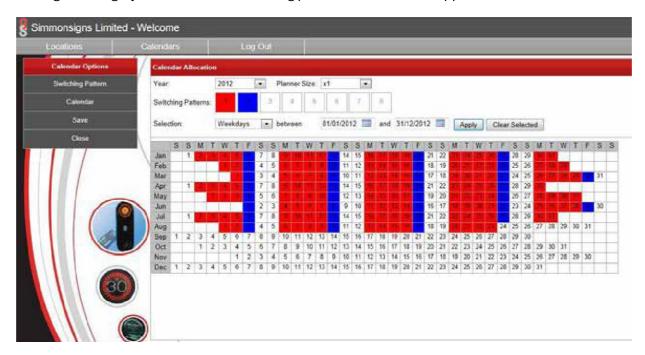


FIGURE 17
CALENDAR WITH SWITCHING PATTERN APPLIED

Other options from this screen are discussed in the table below.

Calendar Option Menu				Display Area		Right Hand Side Menu		
Menu Option	Detail	Link to manual section	N/A		N/A			
Switching pattern	Returns to the switching pattern screen to allow editing of the switching pattern	4.1.1 Create New Calendar						
Calendar	Brings up this option i.e., return to the same place							
Save	Commits the calendar to the database	4.1.5 Save Calendar						
Close	Returns to the previous menu							

TABLE 15 CALENDER OPTIONS MENU

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4.1.4 Save Calendar

When you have finished creating the switching patterns use the Save Calendar menu item to save the calendar. This saves the calendar on the local database and makes it available for deployment. It does not deploy or the calendar to the GPRS Pulsa units. See the section under Send Calendar for instructions on how to deploy the calendar.

Select close to return to the Calendar Options menu.

4.2 Deployment Options Menu

Selecting Send Calendar brings up the deployment options menu. The table below shows the options available under deployment options menu.



FIGURE 18
CALENDAR DEPLOYMENT SCREEN

The calendar deployment screen offers the options below: -

Calendar Deployment Menu			Display Area		Right Hand Side Menu		
Menu Option	Detail	Link to manual section	Detail	Link to manual section	Menu Option	Details	Link to manual section
Select All	Selects all the GPRS Pulsa units shown in the display are to the right of the menu		The drop- down box allows selection of the calendar				
Select None	Deselects all the GPRS Pulsa units shown in the display are to the right of the menu		Main screen allows selection of the sign(s) to receive the selected menu				
Invert Selection	Swaps the selected to deselected and vice versa.						
Send Calendar	Sends the calendar selected in the drop- down box to the units selected in the display area to the right of the menu	4.2.1 Send Calendar					
Close	Close the menu and return to the previous screen	4.1 Calendar Menu					

TABLE 16 CALENDAR DEPLOYMENT SCREEN

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Email: sales@simmonsigns.co.uk

4.2.1 Send Calendar

The display area will indicate the signs available for calendar deployment. To send a calendar follow the steps below: -

- Select the signs to receive the calendar using the check box to the left of the sign name.
- The drop-down box at the top of the display area allows selection of the Calendar to be deployed.
- Select Send Calendar
- The Calendar Progress Monitor Dialog box appears.
- The system will now upload the calendar from the website over the GPRS network to the selected sign(s)
- On completion the Calendar Progress Monitor dialog box will display a message indicating the success or failure of the operation
- The GPRS Pulsa unit will flash twice in quick succession when starting to receive the calendar and will flash again when received.

NOTE

To deploy a calendar to a single GPRS unit typically takes 30 seconds. The system will time out if the process takes too long. To deploy the calendar to less than 4 units 2 minutes are allowed before the operation times out, for over four the time allowed increases proportionally.

4.2.2 Retrieve calendar

Selecting this option produces the Sign Calendar Query screen as shown in the figure below.



FIGURE 19 RETRIEVE CALENDAR SCREEN

Clicking on one of the displayed signs will begin the retrieval of the calendar from that sign. The Calendar Progress Monitor will be displayed indicating the progress of the activity. The sign will be contacted over the GPRS network and the calendar uploaded for inspection.

If the sign cannot be contacted, the user will be informed that the calendar has failed to deploy after a 2-minute interval.

If the calendar is successfully retrieved, after the dialog box closes the Calendar Options\ Switching Patterns menu is displayed. See section 4.1.1 for further details. To preserve calendar versions the downloaded calendar name will be changed by suffixing the date to the end of the filename.

NOTE: Calendars can only be retrieved from a functional unit (displaying a green icon) and from a single unit at a time.

5 ACTIVATION USING TEXT MESSAGE

The GPRS Pulsa can be turned on and off by sending a text message from any mobile phone. The following sequences illustrate the command structure. These should be sent to the GPRS Pulsa voice number.

GPRS Pulsa Text Commands					
Command	Text message structure (Important note commands are case sensitive)	Action			
Pulsa On	Pulsa ONxx (Note no space between and number of minutes).	Turns the GPRS Pulsa on for xx minutes. Where xx is 01 to 99.			
	Pulsa ON	Will run until the next event			
Pulsa Off	Pulsa OFF	Turns the Pulsa off. (Note this will not override the calendar operation)			

TABLE 17 GPRS PULSA TEXT COMMANDS