



# **SMART Pulsa & GSM Pulsa Programming Kit**

## **User Manual**

**Simmonsins Limited**

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## SimPodConnect GSM Software.

The **SimPodConnect GSM** Software is the perfect PC interface for the SimPod transfer device & GSM Pulsa, allowing quick and easy programming of up to two years switching data together with data transfer management of the **SimPod** hand set & the **GSM Pulsa**.

### PC Requirements.

IBM compatible PC running Windows XP or above with Administrator privileges.

Internet Explorer with an internet connection.

One free serial port or a USB port with serial adaptor – up to 15 ports will be scanned.

GSM Only - 56k Modem complete with dedicated analogue phone line – note that only one modem should be enabled.

### Software Installation.

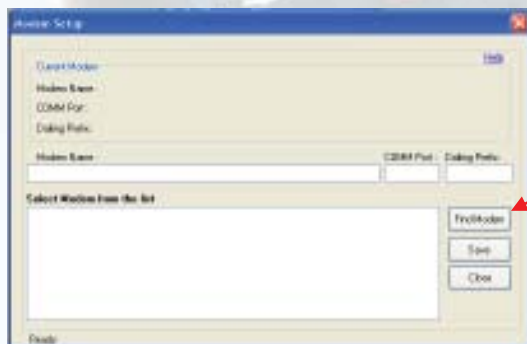
Uninstall previous versions of the software using "Add/Remove Programmes" in the Control Panel. Note that this will not remove existing calendar files which are compatible with newer versions of SimPod Connect GSM Software.

Go to <https://simmons signs.co.uk/road-safety-solutions/school-patrol-warning-lights/smart-pulsa/> and download the latest Simpod software. Unzip the file to a known location and run the Setup1.msi by double clicking on it. Follow the on screen instructions to complete the installation.

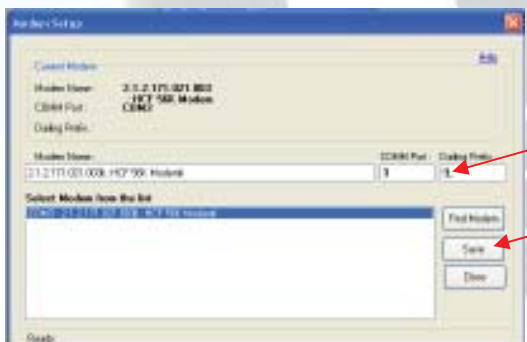
Click the Install SimPodConnect GSM link then click "Run" and follow the instructions. Should a security warning appear click "Run" once more.

### Modem Setup.

Select the "Mode Setup" option from the main menu.



Click "Find Modem" (1) to locate all modems connected to the computer – as shown (2). (This excludes Bluetooth modems which must be added manually as shown below).

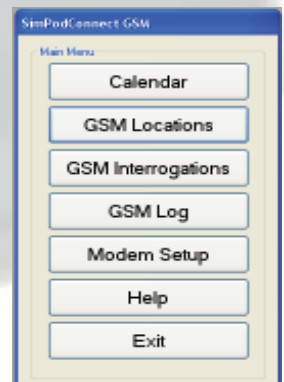


Should a dialling prefix be required – it can be entered manually (3) before saving the settings (4).

### Getting Started.

Using the default settings the SimPodConnect GSM icon will have been placed in the Simmons signs program group & an icon placed on the desktop.

Upon starting the SimPodConnect GSM software the "Main Menu" is displayed.



Select the “Calendar” option in order to enter a switching pattern.

## Switching Patterns

| Description:        | On    | Off   | On    | Off   | On    | Off   | On | Off | On | Off |
|---------------------|-------|-------|-------|-------|-------|-------|----|-----|----|-----|
| 1: Normal schl day  | 08:20 | 09:15 | 11:45 | 13:00 | 15:00 | 15:50 |    |     |    |     |
| 2: Early fin Friday | 08:20 | 09:15 | 12:00 | 12:45 | 15:30 | 15:45 |    |     |    |     |
| 3: Sports day       | 09:30 | 10:20 | 15:45 | 16:30 |       |       |    |     |    |     |
| 4:                  |       |       |       |       |       |       |    |     |    |     |
| 5:                  |       |       |       |       |       |       |    |     |    |     |
| 6:                  |       |       |       |       |       |       |    |     |    |     |
| 7:                  |       |       |       |       |       |       |    |     |    |     |
| 8:                  |       |       |       |       |       |       |    |     |    |     |

A switching pattern is a series of on and off events that can happen on any one day. Using the software it is possible to define up to eight different switching patterns, each with 5 on, and their associated, off events. Once defined any individual switching pattern can be assigned to any day in the calendar enabling switching data to be configured quickly with less risk of errors.

Start by giving the switching pattern a memorable 12 character name. This will be used later as a reminder of what each switching pattern represents.

Enter up to 5 'on' events and the associated 'off' event. (24 hour clock).

The TAB key moves the cursor between each field. Times can be entered directly from the keyboard or by using the up and down arrow keys to increment the figures.

Create up to eight switching patterns then click “Calendar” to move to the next screen.

## Calendar Allocation.

The Allocation screen allows the previously created switching patterns to operate on certain dates.

Pattern: 1 2 3 4 5 6 7 8

Double-click an icon to apply a pattern to a selection.

Selection Rule: All [dropdown] between 01/01/08 and 23/07/08 Go!

Legend:

- 1 Normal schl day
- 2 Early fin Friday
- 3 Sports day
- 4 Undefined
- 5 Undefined
- 6 Undefined
- 7 Undefined
- 8 Undefined

The switching patterns are now represented by numbered coloured squares near the top of the screen. The friendly names are also shown to remind us what each switching pattern represents.



The main grid shown allows a full year's calendar to be edited.  
The year field selects the year for editing.

### Date Selection.

The next stage is to place the switching patterns on the calendar. There are a number of ways to do this.

### Using the Selection Rule.

One of the most useful tools is the selection rule. This allows blocks of dates to be edited quickly.

Using the selection rule drop down box, choose which day or groups of days to edit. Now enter the start and finish of a block of dates.

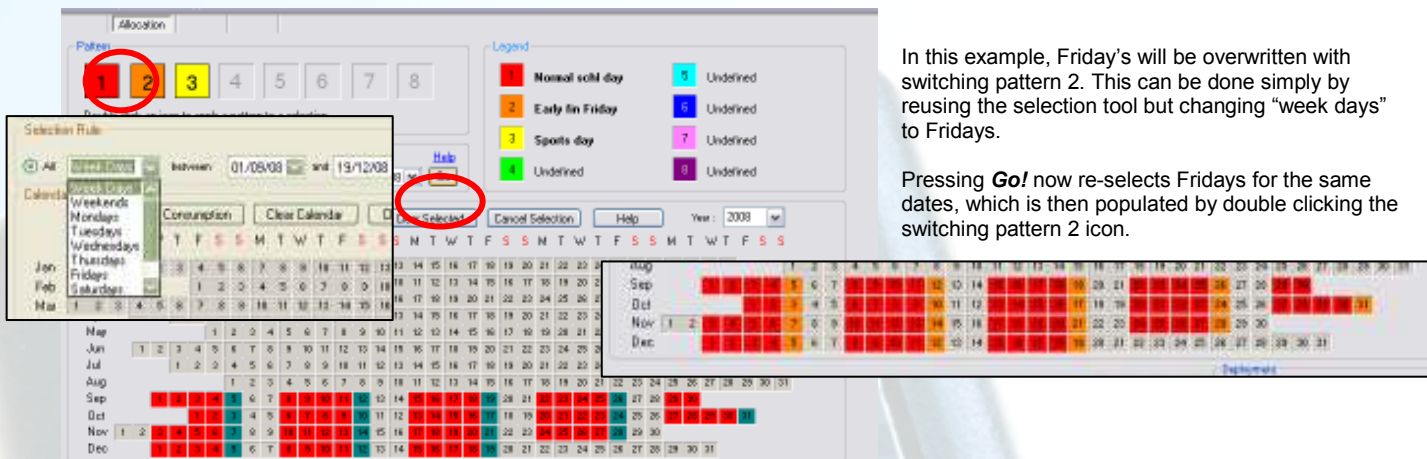
Pressing **Go!** causes all of the dates that meet the selection criteria to be highlighted.

The selection can now be populated with a switching pattern by double clicking the required switching pattern icon.

This will turn the selected cells into the colour of the desired switching pattern.

Using the cursor, hover over each of the coloured numbered squares on the left of the screen.

The switching pattern is displayed next to the correspondonding coloured number rectangle on the right of the screen



In this example, Friday's will be overwritten with switching pattern 2. This can be done simply by reusing the selection tool but changing "week days" to Fridays.

Pressing **Go!** now re-selects Fridays for the same dates, which is then populated by double clicking the switching pattern 2 icon.

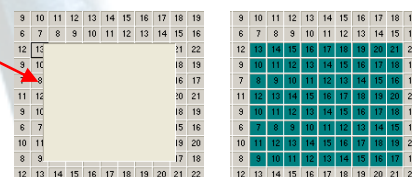
## Selecting Individual Cells.

Individual cells can be selected by double clicking on them. This is ideal for dropping in a sports day for example.

## Selecting Multiple Cells.

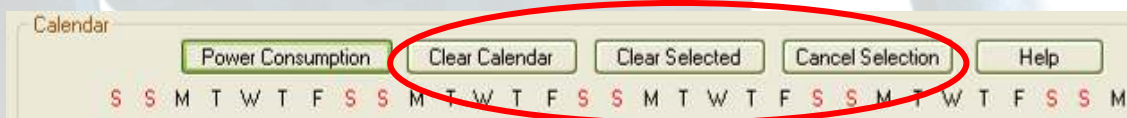
Multiple cells can be selected by dragging a bounding box (1) containing the required cells.

(1)



## Clearing Selection

Three further buttons are provided to enhance the editing process.



**Cancel Selection** deselects all selected cells.

**Clear Selected** returns all selected cells to unallocated.

**Clear Calendar** returns all cells to unallocated & reverts to the current year. This does not clear the switching patterns.

## Power Consumption.

Selecting the *Power Consumption* option opens the *Power Consumption Calculation* dialogue box. This details the cost of the power consumed during the life of the Calendar.

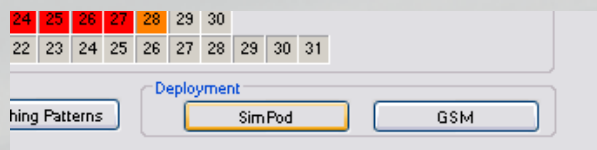
**Note:** The Power Tariff can be altered to suit user requirements. Additional devices can be entered into a database to enable calculations to be undertaken for any type of hardware to any user defined switching pattern. Add a device to the database by clicking file > devices. The database works in the same way as adding a GSM Location.



## Save your work

Once the switching pattern allocation has been completed it's advisable to save work back to the computer. This can be done at anytime using the File → Save, or File → Save As command. This opens a standard windows dialogue box which allows a filename to be given and a preferred folder to be selected.

Click either Simpod or GSM to access the desired deployment screen.





## Data Deployment to SimPod

### Connecting the SimPod

The SimPod communicates with your PC through a free serial (COMM) port. This can be a native port on the host computer or a Serial/USB adaptor (supplied).

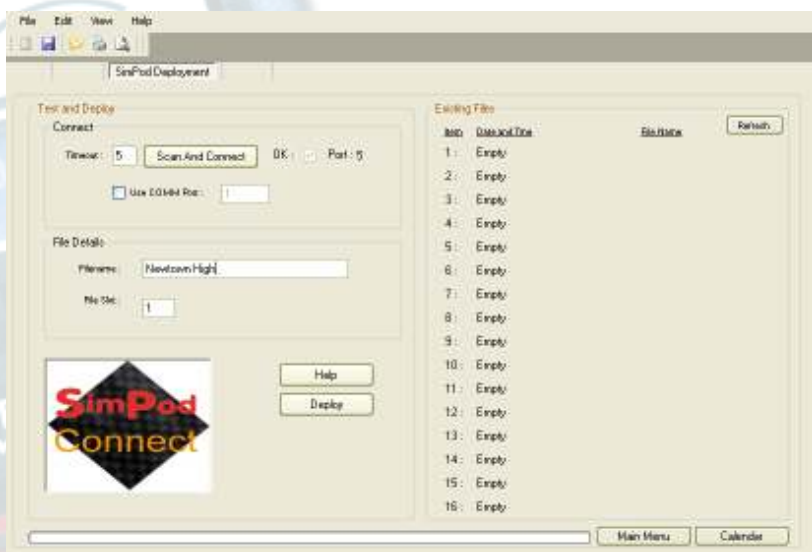
Connect the supplied lead to the serial port using the 9 pin D type plug. The other end of the lead plugs directly into the data port on the side of the SimPod.

Energise the SimPod by holding the power button for more than 3 seconds. Note the SimPod will turn off automatically (power save feature) after a few minutes.

Clicking the "Scan to Connect" button will scan for the SimPod on ports 1 to 9. When the SimPod is found a tick will appear in the OK box.

If the port to which the SimPod is connected to is known by the user, it can be entered manually if preferred.

Now that the SimPod is connected to the host PC, clicking the refresh button will update the existing file list which will show the Name, Date and Time of any files that are already on the SimPod.



### Transferring the Data

Focusing on the File Details box, a descriptive name (up to 12 characters) can be defined. This is not related to the saved calendar filename although it would be good practice to refer to the calendar name in the filename to aid traceability.



The SimPod has eight or sixteen file slots (dependant upon model), each capable of storing a 2 year calendar. They are numbered 1 to 16 (8). Enter the number of the chosen file slot. Please note that if the file slot chosen is already occupied then this file will be overwritten.

Click the deploy button.

### Synchronising the time.

An important feature of the SimPod Connect software is that it will update the real time clock of the SimPod as it uploads the file from the computer.

Because of this, a dialogue box now appears displaying the current time according to the PC. This time can be accepted or adjusted if as necessary.

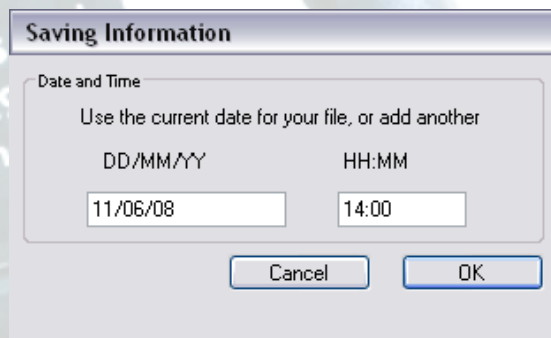
Clicking OK begins the data transfer. A progress bar is shown on the bottom of the screen and the SimPod's display also acknowledges the transfer.

When the transfer is complete a message will be displayed to confirm successful transmission.

If there is problem during transfer an error message will be displayed. Check all connections and that power save feature has not switched the SimPod off.

Clicking the file list refresh button will now display the new uploaded file in the file list against our selected slot.

The SimPod is now ready to use. Please refer to the SimPod Calendar transfer device user instructions.



## Data Deployment to GSM Pulsa.

In order to deploy a calendar file to a GSM Pulsa – a GSM location must first be added & then populated with all relative information for that location i.e. voice & data numbers.

**Important:** Note that the time on the computer being used must be correct to ensure accurate switching.

### Adding a GSM Location.

Go to the main menu, click *GSM Locations*.



Create a record by clicking *New* (1).

A screenshot of the 'Locations Mode' window. It features a filter section at the top with a text input field and 'Filter' and 'Clear filter' buttons. Below the filter are navigation buttons: 'New', 'Amend', 'Delete', 'Save', and 'Cancel'. The 'New' button is circled in red and labeled with a red '(1)'. The window also displays a table with columns for 'No.', 'Inventory No.', 'Voice/Text Numbers', 'Data Numbers', 'Serial Numbers', 'Last Update', 'Filename', and 'Expiry Date'.

Enter the location details including the Voice & Data numbers for each GSM Pulsa. Up to 8 GSM Pulsas can be added per location. An inventory number can be included to aid traceability.

Voice & Data numbers are given by service providers with a Data Sim Card – the voice number is used by the GSM Pulsa to receive text messages & the data number is used to transmit & receive data.

Click *Add* (2) to save the location.

**Note:** There is no restriction on the amount of locations that can be added to the database.

A hard copy of the location details can be produced by clicking *Print Location* (3) – once a location has been added.

Once the session is complete – click *Main Menu*.

A screenshot of the 'Locations Mode' window. It shows the 'Print Location' button circled in red and labeled with a red '(3)'. The 'Add' button is also circled in red and labeled with a red '(2)'. The window displays a table with columns for 'No.', 'Inventory No.', 'Voice/Text Numbers', 'Data Numbers', 'Serial Numbers', 'Last Update', 'Filename', and 'Expiry Date'. The 'Add' button is located at the bottom right of the window.

### Amending a GSM location.

A screenshot of the 'Locations Mode' window. It shows the 'Amend' button circled in red. The window displays a table with columns for 'No.', 'Inventory No.', 'Voice/Text Numbers', 'Data Numbers', 'Serial Numbers', 'Last Update', 'Filename', and 'Expiry Date'. The 'Amend' button is located at the bottom right of the window.

Go to GSM Locations as above.

When multiple records are entered - search for the required location by using the filter or arrow buttons.

A screenshot of the 'Locations Mode' window. It shows the 'Amend' button circled in red. The window displays a table with columns for 'No.', 'Inventory No.', 'Voice/Text Numbers', 'Data Numbers', 'Serial Numbers', 'Last Update', 'Filename', and 'Expiry Date'. The 'Amend' button is located at the bottom right of the window.

Click *Amend* to display the location details, changes can now be made. Click *Save* to record changes.



## Interrogating a GSM Pulsa.

Go to GSM Interrogations from the Main Menu.

Search for the required location by using the filter or arrows to scroll through the records.

**Note:** Confirm that a dialling prefix is required – this will default to the settings given during the modem set up but can be altered to suit the phone system which is in use.

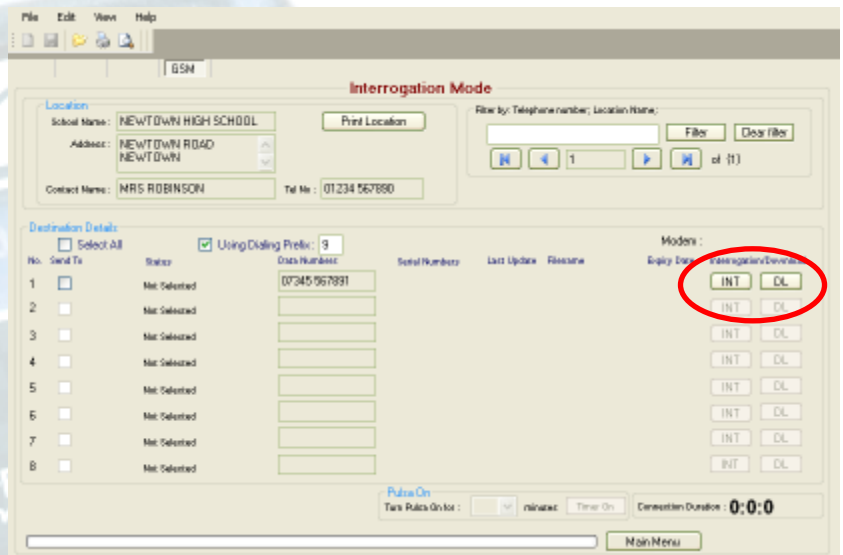
Each GSM Pulsa listed at each location has an *INT* button next to it. By clicking *INT* the GSM Pulsa is then dialled & interrogated. Should the connection fail or be lost, click the *Connect/Retrieve* button to retry.



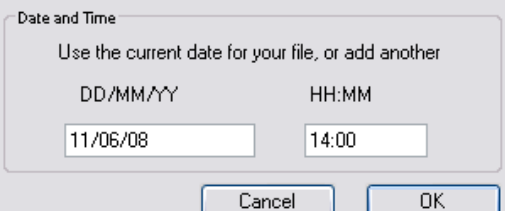
The full details of the GSM Pulsa are then displayed & a log is created.

From the *Pulsa Details* screen, the GSM Pulsa time can be checked & updated by pressing *Update*.

**Note:** The current time & date is derived from the users PC & can be modified before deployment.



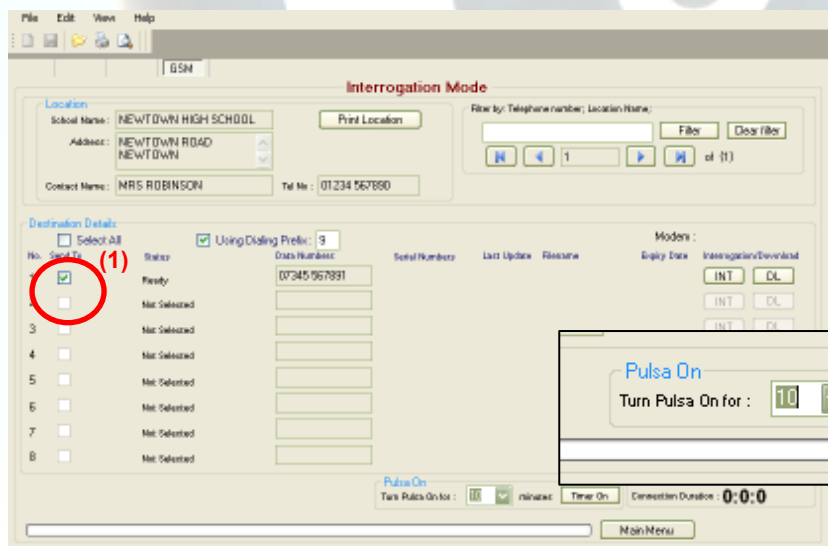
### Saving Information



## Using the GSM Pulsa Timer.

Go to GSM Interrogations from the Main Menu.

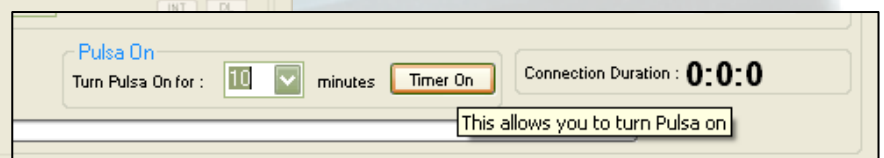
Search for the required location by using the filter or arrows to scroll through the records.



Place a tick in the box (1) at the side of the required Pulsa or tick *Select All*.

At the bottom of the Interrogation screen a *Pulsa On* box is displayed.

Enter the amount of time that the Pulsa should turn on for & press *Timer On*.



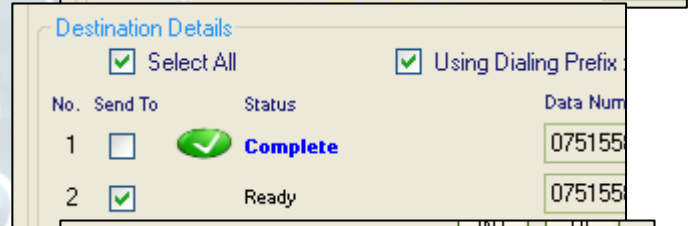
The software will now connect to the Pulsa via a modem, *Connecting To* is displayed.



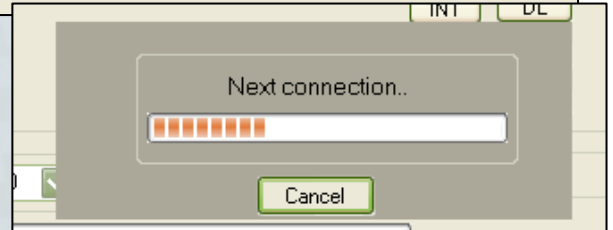
When a connection is made *Starting Timer* is briefly displayed.



On completion *Complete* is displayed by each Pulsa.



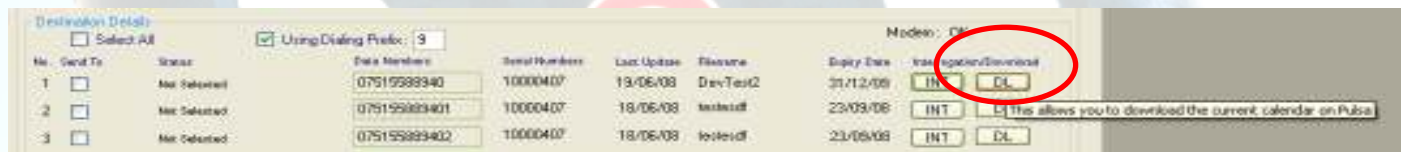
Should multiple Pulsas be selected then between each deployment an option is given to *Cancel* the deployment process.



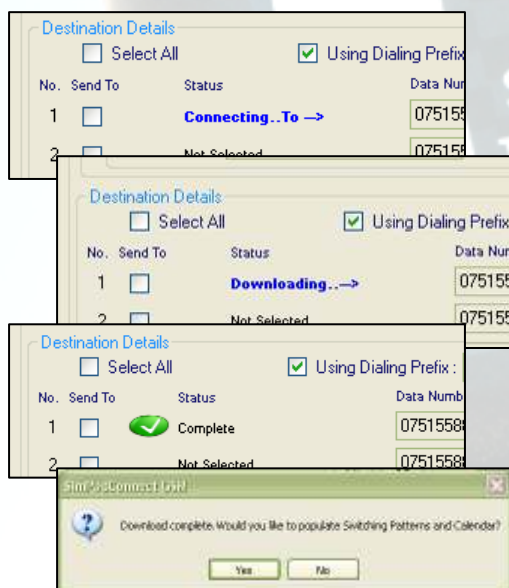
### Downloading a Calendar from a GSM Pulsa.

Go to GSM Interrogations from the Main Menu.

Search for the required location by using the filter or arrow buttons.



Each GSM Pulsa listed at each location has a *DL* button next to it. By clicking *DL* the GSM Pulsa is then dialled & a copy Calendar which is held in the memory of the GSM Pulsa is downloaded. Should the connection fail or be lost the click the *DL* button to retry.



The software will now connect to the Pulsa via a modem, *Connecting To* is displayed.

When a connection is made *Downloading* is displayed & a progress bar is activated at the bottom of the screen.

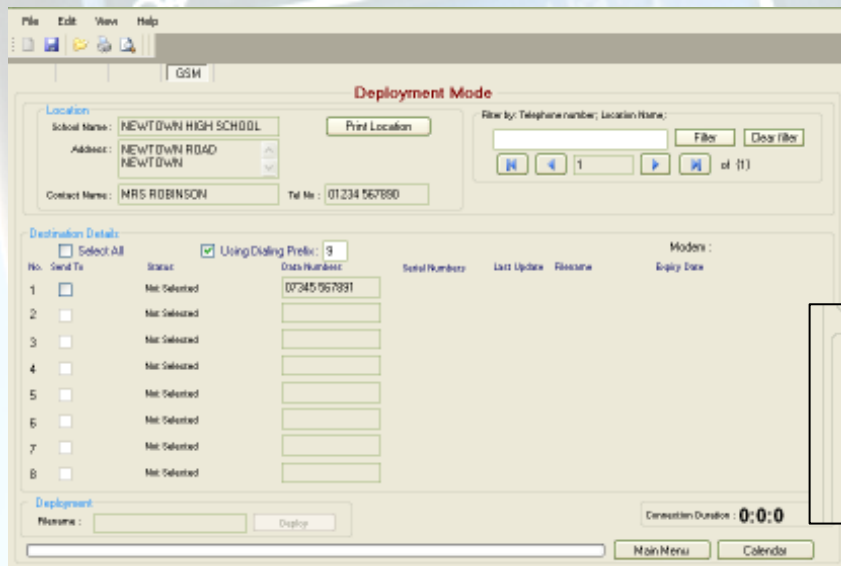
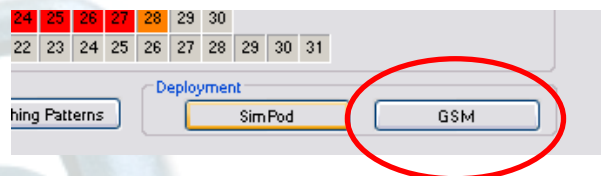
On completion *Complete* is displayed by each Pulsa.

Once the Calendar has been downloaded from the GSM Pulsa, it can be viewed, amended & saved.

**Note:** Any Calendar which is open in the SimPodConnect GSM software will be overwritten by the Calendar which is being downloaded. An option is given to save any open Calendar before downloading one from a Pulsa.

## Deploying a Calendar to a GSM Pulsa.

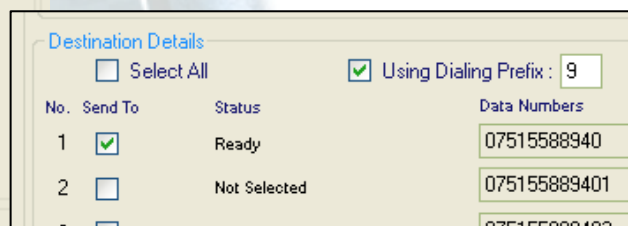
Once a Calendar has been populated with a switching pattern – the option is given to deploy to SimPod or GSM. Click GSM.



The "Deployment Mode" screen is displayed.

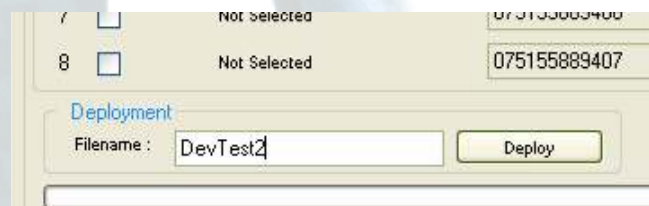
Note: The last location viewed is primarily shown. The location can be changed by using the filter or arrows to scroll through the records.

Check the *Send To* box or *Select All* to choose the Pulsa to be programmed.



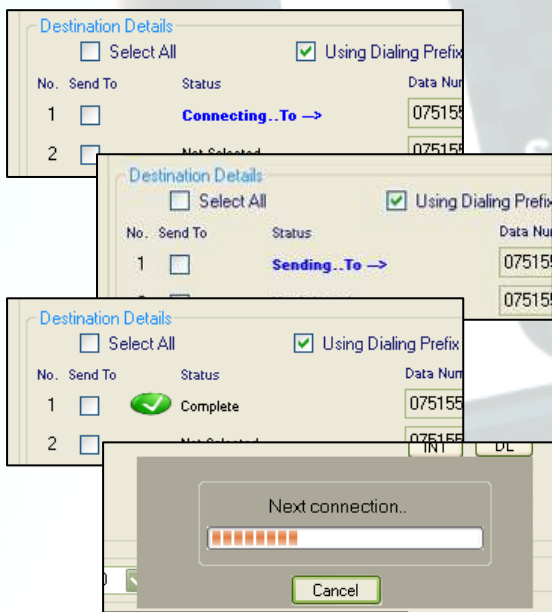
A filename must be entered before deployment.

Focusing on the Deployment box, a descriptive name (up to 12 characters) can be defined. This is not related to the saved calendar filename although it would be good practice to refer to the Calendar name in the filename to aid traceability.



Once the filename has been entered click *Deploy*.

The software will now connect to the Pulsa via a modem, *Connecting To* is displayed.



When a connection is made *Sending To* is displayed & a progress bar is activated at the bottom of the screen.

On completion Complete is displayed by each Pulsa.

Should multiple Pulsas be selected then between each deployment an option is given to *Cancel* the deployment process.



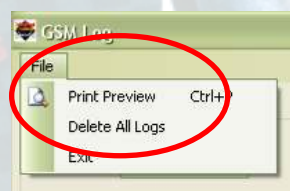
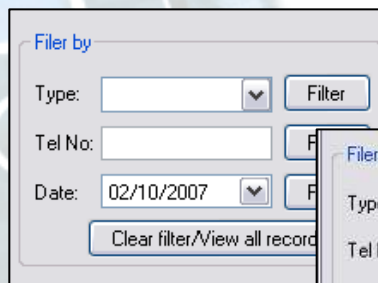
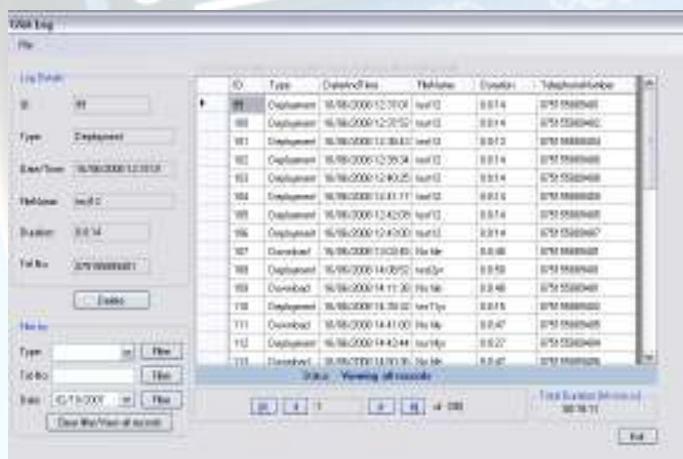
## GSM Log.

Each time there is any kind of communication with a GSM PULSA, a log file is created.

The log details all calls made by the SimPodConnect GSM software to any number.

Filters can be applied so that connection times can be comprehensively monitored.

Note: The Main Menu can be accessed at any time via File > Main Menu.



From the File menu a print preview can be obtained & the log can be deleted.

## Text Activation.

The GSM PULSA can be turned on & off by a text from any mobile phone.

Simply text the following sequence to the GSM PULSA **voice number**.

Your text should read **PULSA ONxx** or **PULSA OFF**

Where xx is the number of minutes required between 01 & 90.

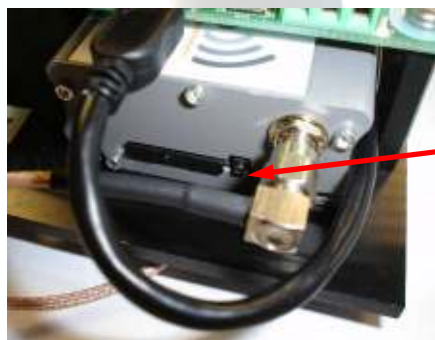
Note : The message is not case sensitive.



## Fitting a data Sim card into a GSM PULSA.

Open the GSM PULSA to reveal the electronic components.

Locate the modem beneath the main control board.



The Sim card holder is situated at the bottom of the modem.

To open the holder depress the button to the right of it – the holder then ejects itself from the slot.

Place the Sim card in the holder & carefully replace it into the slot.

The GSM PULSA is now ready to use,





## SimPod calendar file transfer device.

The **SimPod** is a hand held transfer device enabling switching data, generated by the SimPod Connect software, to be uploaded to the Simmons signs Smart Pulsa or GSM Pulsa school patrol warning signals.

### User Instructions.

Below is a summary of the functions of the SimPod transfer device.  
Use the up and down keys to scroll between the menu items.

### To Switch on.

Press and hold the center button for approximately 3 seconds.

If the time and date has not been set, or the battery has been refitted, the SimPod will ask you to enter the current time and date. Simply use the up and down keys to adjust the hours. Press the centre button to move to minutes. Repeat for the date, month and year. Finally specify the day and confirm update.  
Press *Enter* to continue.

### File Menu.

This lists the stored calendar files and allows the desired file to be selected for upload into the Smart Pulsa signal head. Use the up and down keys to select the required file then press select to enter the send menu. Pressing select again will send the file to the nearest Smart Pulsa. Communication with the Smart Pulsa will be confirmed by two rapid flashes of the Smart Pulsa display arrays at the start of data transfer and again at the end of data transfer. Transfer confirmation will also be displayed on the SimPod.

NOTE: Solar versions must be flashing to accept communication. Manually swipe magnet between rivets at the base of the Smart Pulsa to turn on.

### SimPod Menu

The SimPod menu accesses various utilities relating to the SimPod handset.

#### **Simpod Time.**

Returns the current time and date registered with the SimPod.

#### **Set Time.**

Allows you to update the SimPod time if incorrect.

#### **Battery Check.**

Reports on the battery condition.

#### **Exit**

Returns to the previous menu.

### PULSA Menu

#### **Get Pulsa Time.**

Displays the real time clock values from the Smart Pulsa.

#### **Set Pulsa Time**

Synchronises the Smart Pulsa time with the SimPod time. - **Ensure that the SimPod time is correct!**

#### **Next Switch Time.**

Interrogates the Smart Pulsa and returns the next switching time for that day. If the Smart Pulsa is 'off' the next 'switch on' time will be displayed. If the Smart Pulsa is 'on' the next 'switch off' time will be displayed. If the SimPod displays '??:??' it means that there are no more instructions for that day.

## PULSA Menu (continued)

### Active Filename.

Reports the name of the calendar file currently resident in the Smart Palsa together with the date and time it was uploaded.

### Pulsa On.

Manually activates the Smart Palsa. This option provides more options allowing the switching period to be automatically timed from 10 minutes to 60 minutes in 10 minute increments. When 00 minutes is selected the Smart Palsa will stay on permanently until the next calendar event or until it is switched off with the Pulsa Off function.

### Pulsa Off.

Sends a command to switch the Smart Palsa off. If this happens while under calendar control the Palsa will stay off until the next on event.

### Range Check

This allows you to check communication with the Smart Palsa. It is used in conjunction with the Set Range option which allows you to adjust the communication sensitivity. This may be required if there is more than one Smart Palsa in close proximity. Selecting this option will cause **all** Smart Palsa's within range to flash for two cycles.

### Set Range.

When uploading a calendar file to the Smart Palsa, it is important to ensure that you are addressing the correct unit. This is especially so if there is more than one Smart Palsa in close proximity. By selecting *Set Range* you can adjust the SimPod output power from LOW (up to 5m) to MED to HIGH (up to 10+ m). This enables the selected SMART PULSA to be brought into focus excluding all others.

### Exit

Returns to the previous menu.

### To Switch Off

Press and hold the center button at any time for 3 seconds and you will be prompted to confirm 'switch off'.




### Auto Switch off

The SimPod will automatically switch off after 2 minutes if it is unused.

### Battery Change.

A battery warning is given if the battery is low when the SimPod is switched on. To change the battery slide the battery cover on the back of the SimPod down and replace with a 9 volt PP3 type battery.

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