

ON-GUARD

Guard Management System

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Introduction

“On Guard” tm is designed to exceed all the requirements of a modern Guard tour system.

“On Guard” dramatically improves the reliability and performance of the traditional Guard management systems by addressing the following shortcomings of competitive systems :

Remote Monitoring

Utilizing the latest cell-phone technology, On-guard transmits data to a central server where it is then stored and automatically emailed to relevant parties.

The cost of this data amounts to 1 South African cent per message. Less than R 2.00 per month.

Guard Identification

Identification of Guards is made possible by the use of low cost, high reliability I-Button technology. Each Guard can be issued with his own unique I-Button. This facilitates accurate records of who is or was on duty.

Down-Time.

Down time of the system is eliminated as the system is not reliant upon only one baton. Any enrolled I-Button can be used as a baton.

Event Log.

A self contained event log can be downloaded to extract information pertaining to the times that individual points were visited, which guard was on duty, etc.

Setup software.

The system can be programmed with the supplied software to suit the requirements of most Guarding sites with respect to the number of points, the time taken to patrol the given points. The end user is no longer reliant on the technical services of a servicing company when moving the system from site to site or changing the configuration.

Random Routes.

Different routes may be programmed to ensure that the Guard’s movements between points remain confidential. The system randomly selects the pre-programmed routes if this option has been selected.

Radio / tele-dialer interface.

“On Guard” may be interfaced with any Radio transmitter or Tele-Dialer.
“On Guard” has programmable outputs for :

- ✚ Patrol Complete
- ✚ Patrol Not finished
- ✚ Patrol Not started
- ✚ Wrong Route
- ✚ Incomplete Patrol
- ✚ Inspector Arrive / Depart
- ✚ Mains fail / Restore
- ✚ Fire
- ✚ Panic
- ✚ Tamper
- ✚ System on / off

All or any of these outputs may be software consolidated to 1 or more outputs.

Inter-point delay.

Sleeping on the baton, a term used for a Guard who does a very quick tour of all the points and then takes a nap in the rest period, can be prevented by invoking our unique inter-point delay. The intelligent points will not accept the Guard’s I-Button until a pre-programmed time has elapsed since the he visited the previous point.

Auto - Schedule : (Book on / Book off)

“On Guard” can be pre-programmed by the end user’s PC software to turn itself on and off.

Manual override by inspector tag

Using a pre-programmed inspector tag, your supervisor can turn On-Guard on and off for the purposes of running un-scheduled patrols or demonstrating the system.

Remote set-up

The system can be remotely configured via our GSM modem , if fitted. This has a huge impact on cost saving as a trip to site to re-program can be averted.

SMS (Short message service)

On-guard, when fitted with the GSM modem will be able to SMS supervisors of priority events.

Serial Data Communication.

A Serial connector is provided for interface to printers or our proprietary GPRS (General Packet Radio Service) modem. This is of particular relevance for Companies requiring live data of times of points visited and identifying Guards who patrolled & Supervisors who visited.

GSM modem.

By attaching the optional GSM modem, data is sent to On-guard's servers utilizing GPRS where it is collated and emailed out in one of several ways.

- 1 Immediately
- 2 At 6am each day.

Data is transmitted using the Cellular network. The cost per message is approximately 1 South African Cent

Exception Reports.

Three types of reports are configurable.

1. Exception Report
2. Patrol Report
3. Immediate Report

Paging

We are able to offer paging of priority signals in the following Cities:

**Cape Town
Johannesburg
Durban**

Programming Guide

Please read the manual carefully and take extra care to read the **Important and Notes highlights !**

The software contained on the CD may be used on any Windows operating system.

A female to female serial cable (Laplink) cable is required to connect On-Guard to your PC .

Step 1. Connect PC to On Guard.

Connect your PC or Laptop using your serial port (Comm. Port 1 or Comm. port 2 etc.)

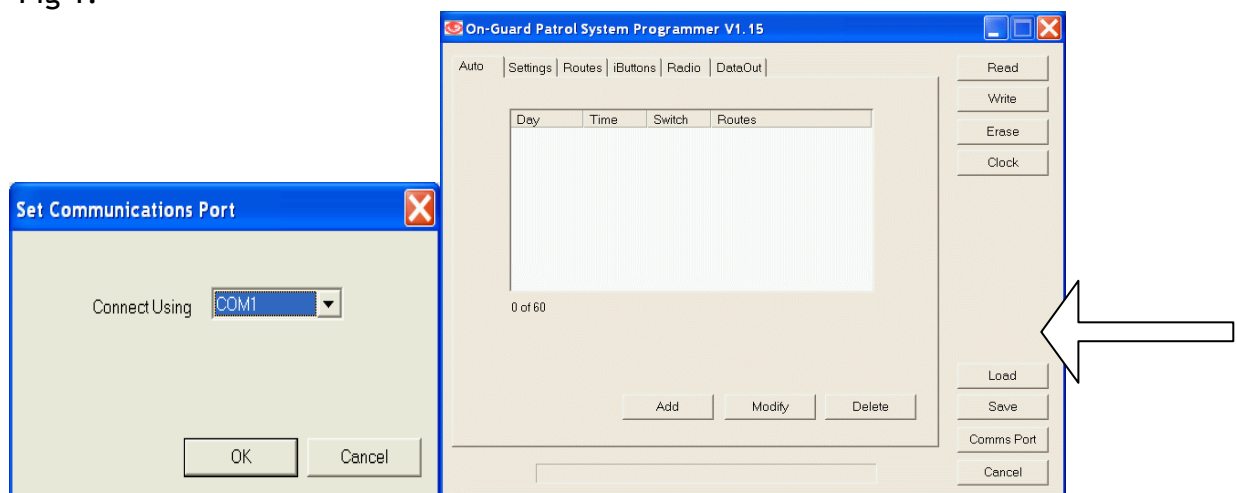
Step 2. Run software.

Double click on the “On Guard” icon.

Step 3. Configure Software.

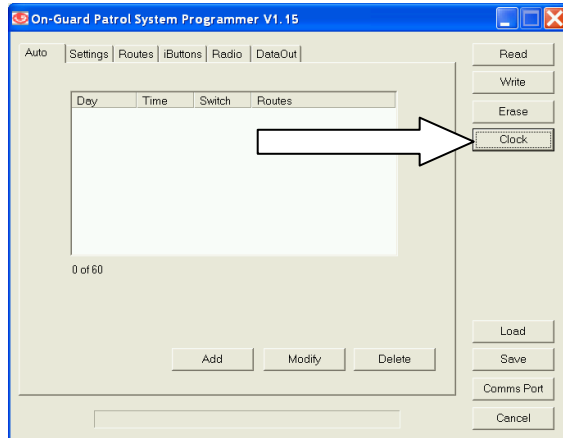
Configure your software to match your serial port - click on the button labeled “Comms Port”. You will see a dialogue box Fig 1. Select the pull down arrow and choose the correct port. Press the OK button.

Fig 1.



Step 4. Test communications

Test Communication with “On Guard” by pressing the “Clock” button.



You should see the dialogue box - Fig 2

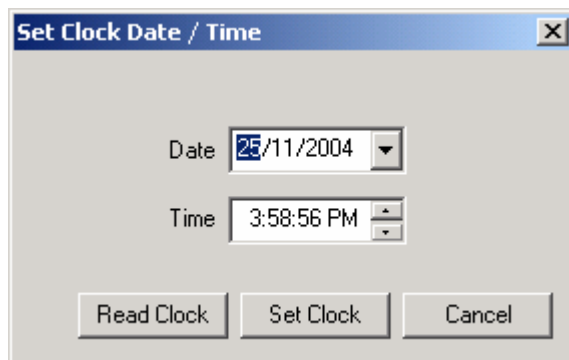


Fig 2.

If you see the dialogue box in figure 2 above, you have established communication with “On Guard”. You are now ready to Upload the program settings from “On guard” (**READ button**) or you may Download the new settings from your PC to “On Guard” (**WRITE button**)

Problem ?

Ensure that “On Guard “ is powered up and that the serial cable connecting your PC and “On guard” are firmly attached.

Have you specified the correct Comm port in Windows ?

If you still have a problem, call our technical help line.

Well Done... you are now ready to start programming “On Guard”

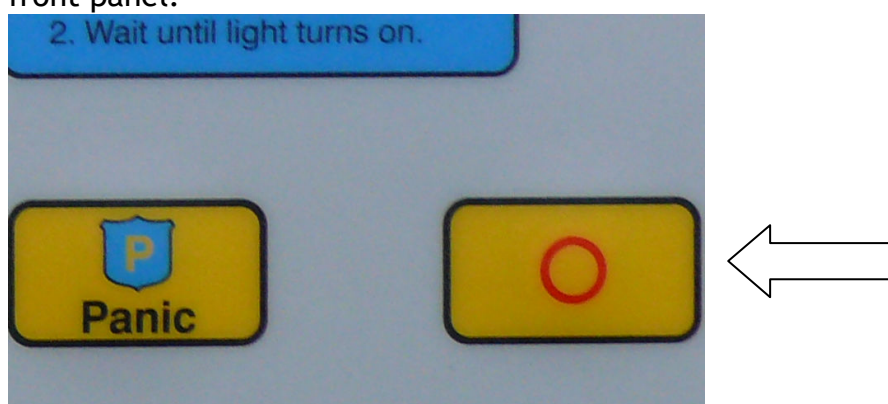
Step 6. Setting the Clock.

The correct clock / time date setting is important if you need to use the Schedule function or event buffer.

Enter the correct time and date in the Dialogue box as per fig 2.

Modes of operation .

“On Guard” has two modes of operation. It can operate according to programmed Schedules or it can be operated by the On/Off button on the front panel.



Proceed to step 7 for Manual operation or Proceed to step 8 for Schedule operation.

Step 7 Manual operation .

To allow the On/off button to operate, check the box “Manual On / off” On the Settings Tab as per fig 4.

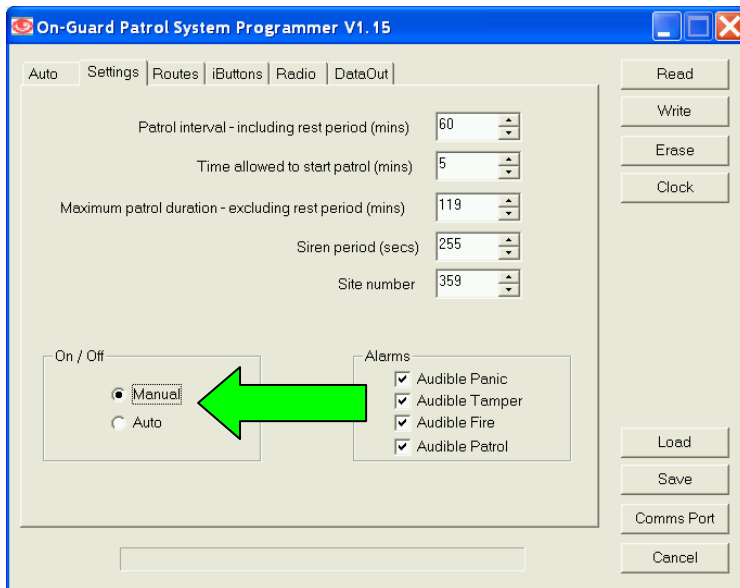


Fig 4

Select the Button “ Write” as per fig 4.

The Software will confirm that you want to overwrite the current settings .(Fig 5)



Fig 5

Press yes and the settings will be changed.

“On Guard” can now be operated from the Button on the front panel.

Step 8. Schedule operation.

To operate “On Guard” according to a schedule, the “Manual On/ off” box needs to be Unchecked (Above - Fig 4) and the schedules need to be set up as per fig 6.

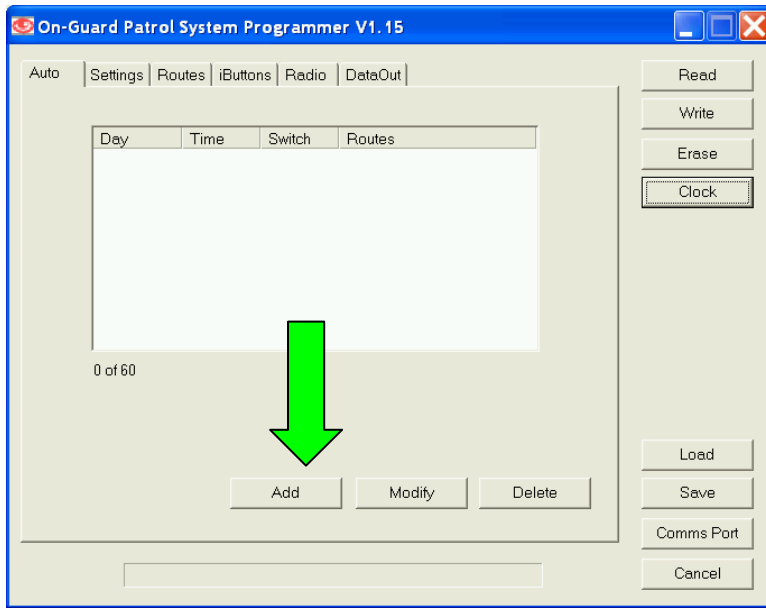


Fig 6

Setting up Schedules.

To set up a new Schedule, Press the Add button . You will see a dialogue box as per figure 7

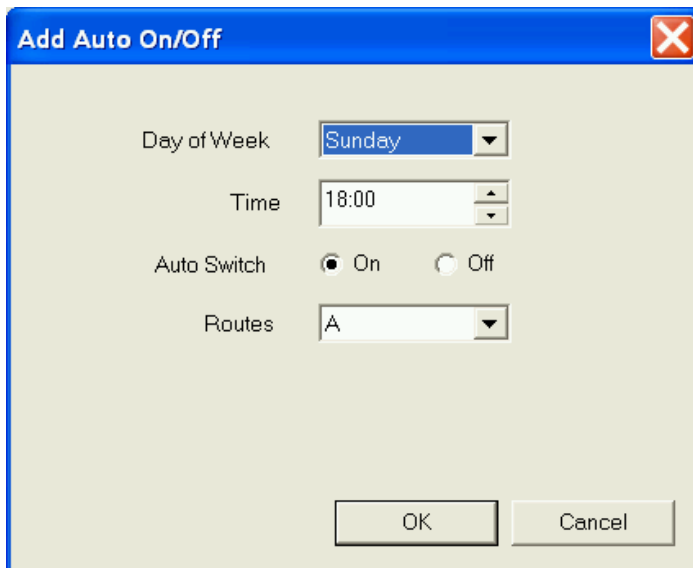


Fig 7

Example : Fig 7 above is configured for a Guard to commence Duty on Sunday at 18H00 . Pressing the “Add” button will add this routine.

The Route to be followed in this example is route A. routes are set up under the **Routes TAB**.

Note : This routine still has to be written to “On Guard” by pressing the “Write” button when you have added all the Schedules !

After you press ADD, your screen should look like fig 8 below.

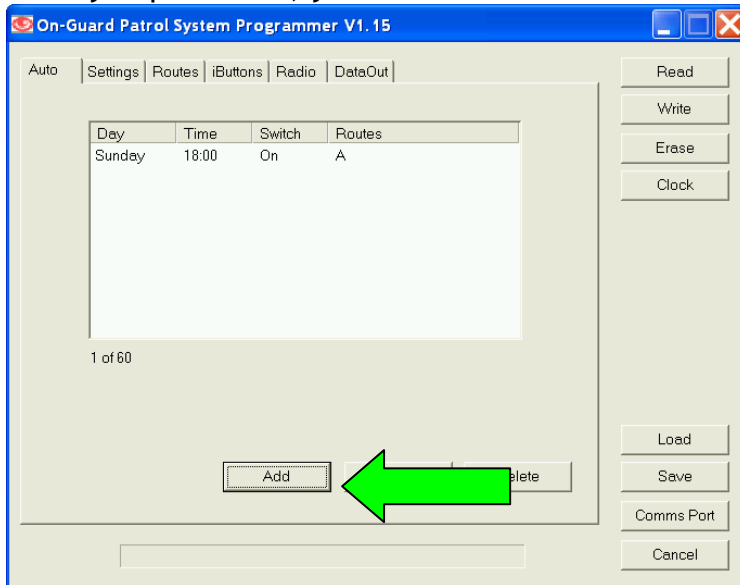


Fig 8

Example. If you want your Guard to go off duty at 8 am on Monday Morning, Press the “Add” Button and enter the details as per Fig 9.

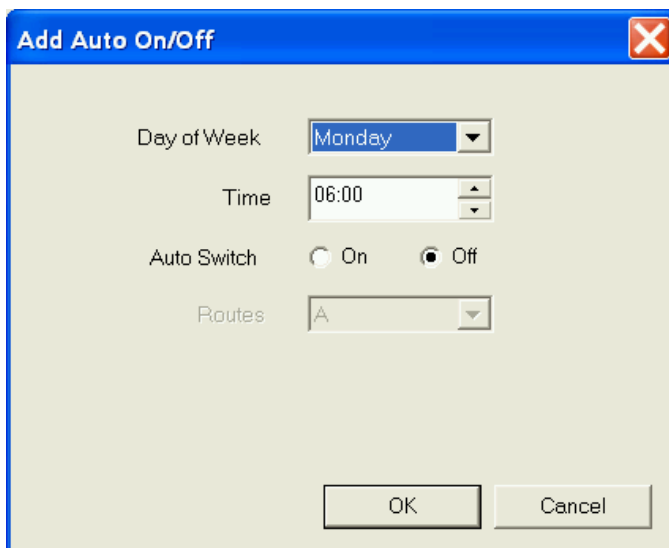


Fig 9

Press the Ok button and your screen should look like fig 10 below.

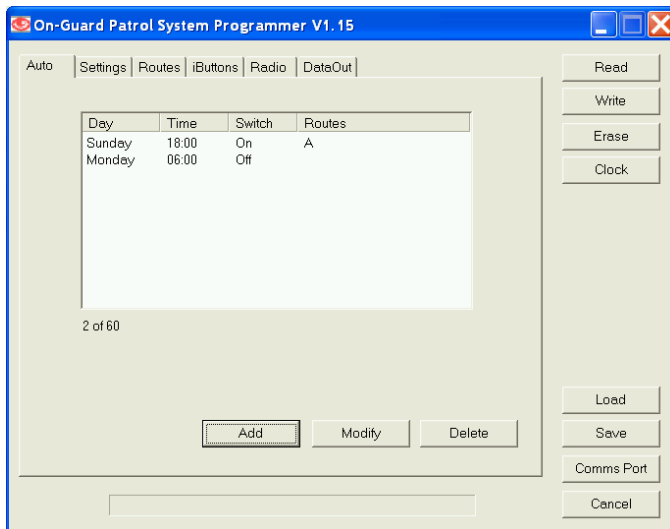
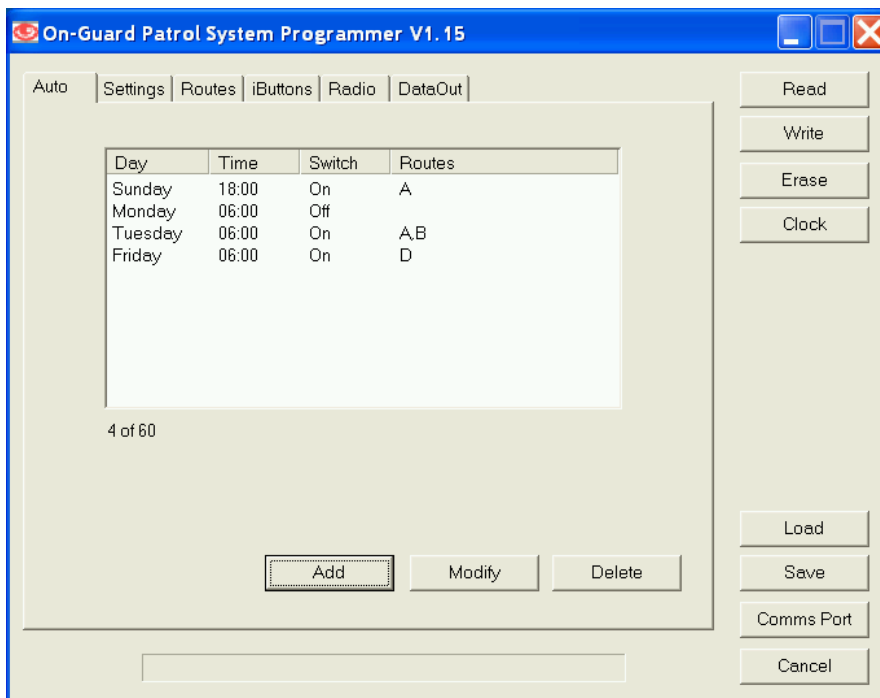


Fig 10

Important !

You need to specify what route A is before the system will work correctly.

You can program On-guard to use routes A and B for Tuesday, Wednesday, Thursday Route D on Fridays..... See the example below.



Note : You will see that there is **no** OFF programmed between Tuesday and Friday, hence the system will continue to request routes A&B between Tuesday 6 am and Friday 6 am.

Continue adding the schedules as per your requirements.

Step 9. Setting up the Points.

Inter point delay

“On Guard” may be configured for inter-point delay. The “inter point” delay drop down box must contain the minimum period, in minutes, that the guard should take to patrol to between points. If the point is tagged within the “inter point” delay period a red light on the point will come on. The “Inter point” delay Check box needs to be selected for “Inter point “delay to function.

Revisit points

“On Guard” may be configured to allow a guard to “Revisit” a point which may have been inadvertently missed during his patrol. “On Guard” will extinguish the lights of the points that were visited when the “Tag” is downloaded. Any “missed” points will remain illuminated and the guard will have the balance of the “Maximum Patrol Duration” to “Revisit” the missed point. The “Re visit points “ check box needs to be selected for this function. If this function is not selected, “On Guard” will extinguish visited points on completion of the tour, Missed points will flash for 5 seconds and “On guard” will report “Missed Point”.

Use Routes

“On Guard” may be configured to force the Guard to patrol one of four pre-programmed routes. If “Use Routes” check box is selected, “On Guard” will randomly select which of routes A, B, C or D the guard must follow.

It is recommended that a plan of the facility being guarded is drawn up and the position of the various points marked on the plan. A route description should be added to the plan, for **Example** :

Route A : Point 1, Point 2, Point 3, Point 4, Point 5.

Route B : Point 5, Point 4,

Route C : Point 16, Point 15, Point 14, Point 13

Route D : Point 7, Point 8, Point 9, Point 10

A “*Patrol complete*” event will be generated if all the points are visited in the correct sequence.

A “*Wrong Route*” event will be generated if the points are visited in an improper sequence.

A “*incomplete Patrol*” event will be generated if any one of the points are omitted in during the guard tour.

If “Use Routes” is not selected, The Guard may visit any point, in any order.

A “patrol Complete” signal will be triggered if all points are visited.

Next, select the button relating to the route you are going to program. In this example, we are programming **Route A**. with **5 points** and an inter-point delay of 4 minutes.

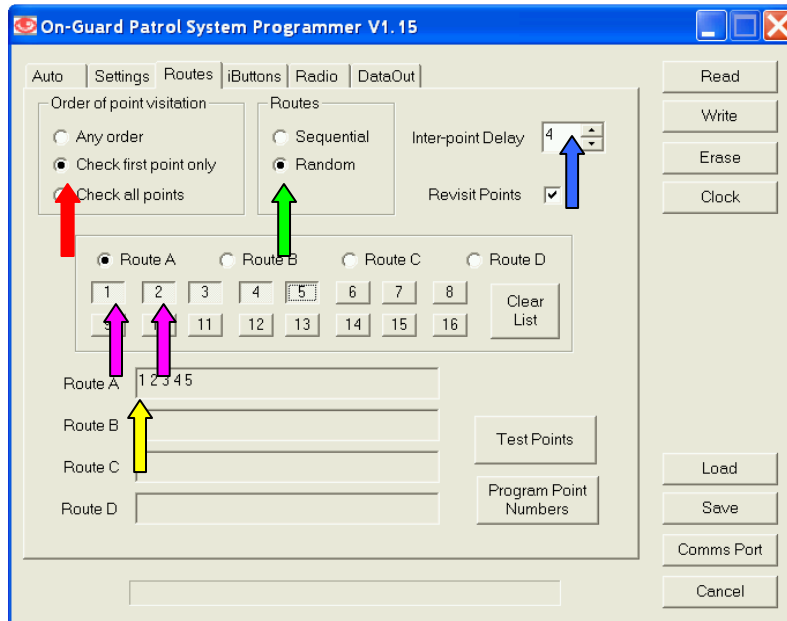


Fig 13

The **Red** arrow is indicating On-guard will check to see the first point visited corresponds with point 1, highlighted by the yellow Arrow.

The **Green** arrow indicated that On-guard will randomly select between Routes programmed for that schedule.

The **blue** Arrow indicates that the inter-point delay is 4 minutes.

Important

The inter-point delay is defaulted to 255 minutes. If you want turn it off, specify 0 minutes.

Important

The time allowed to perform a patrol must be taken into consideration when specifying the duration of the inter-point delay. For example: 60 minute patrol with ten points with an inter-point delay of 5 minutes between points will work ($11 \times 5 = 55$ minutes). An inter-point delay of 6 minutes would not work ($11 \times 6 = 66$)

In the above example, (Fig 13), we have chosen points 1,2,3,4,5 This means that when Route A is illuminated on “On Guard”, the guard has to commence with point 1 and then visit the rest of the points in any order.

Next, Add Routes B, C & D (See the example beneath) Fig 14.

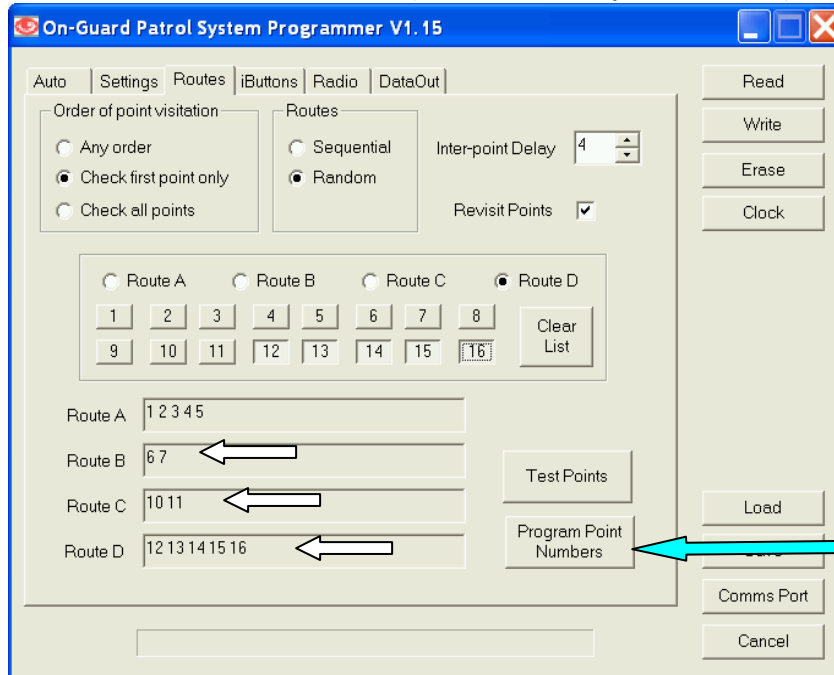


Fig 14

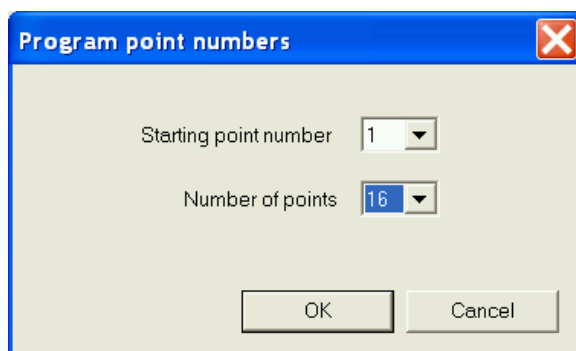
Programming points.

The “Micro points”, supplied with “On Guard” are shipped with no numbers.

You need to Number the points in the following easy sequence.

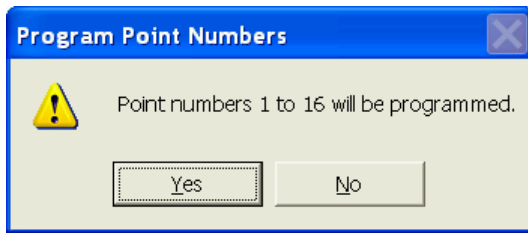
1. Place the points in a row on a flat surface.
2. Press the button labeled “Program Point Numbers” - Fig 14 above.

The following screen will be displayed. Select the starting point number and the number of points to be programmed. Press OK.

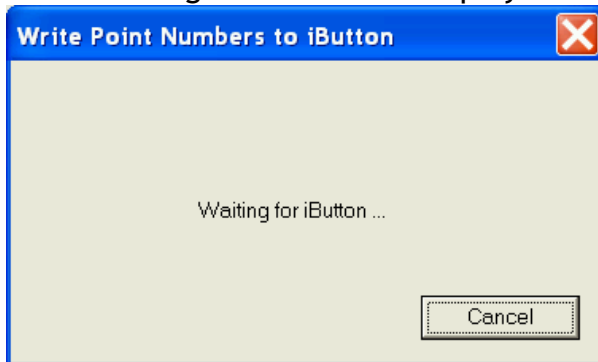


Press OK to proceed.

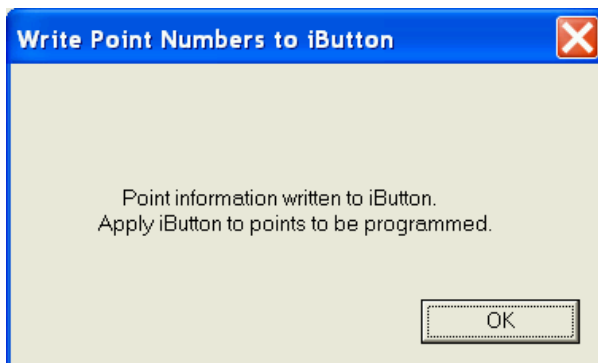
The following screen will be displayed.



Press Yes to proceed.
The following screen will be displayed.



Present any “Tag” to “On Guard”.
The following screen will be displayed.



Now present the “Tag” to each point, in sequence. The first point “Tagged” will flash both LEDs once, The second point tagged will flash both LEDs Twice, etc.

Important

You will save yourself a lot of heartache if you bench-test On-guard by performing a Mock patrol before mounting the points.

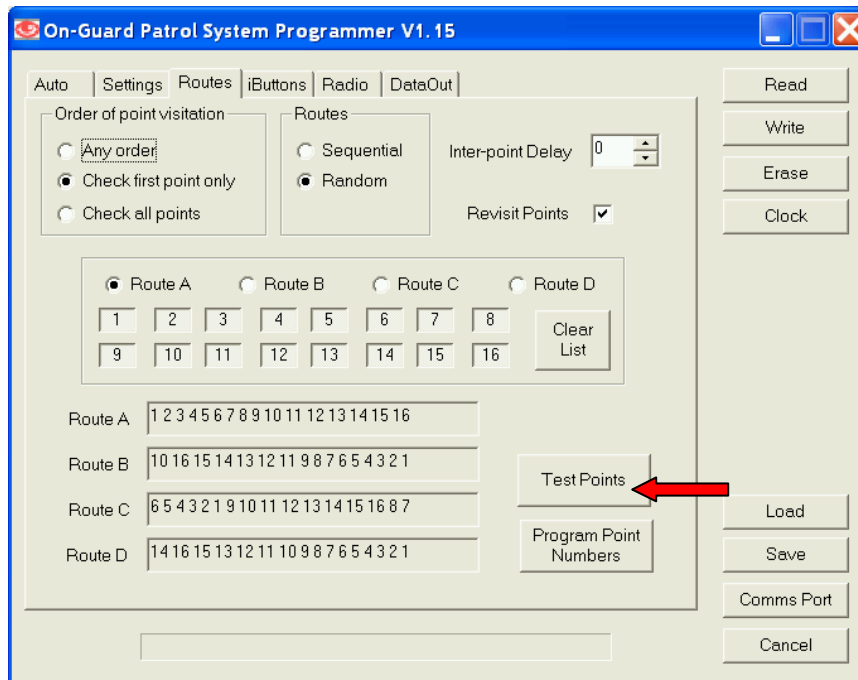
Note

We have found that sometimes the user touches the same point twice (un-intentionally) and this results in the points being assigned the incorrect number. This can cause chaos . Be sure to count the number of times the LED’s Flash to verify that you have programmed the point correctly !

Note :

You can program an ibutton as a test tag.
See Red Arrow below.

The test tag may then be used to check the functionality of all points. If they are operating correctly, the red and green led's will flash alternatively.



Step 11. Settings

The Settings Tab has the default number 255 in each block. 255 represents the unit of time which will elapse after “On Guard “ becomes active as a result of following the schedule or being manually switched on.

Patrol Interval is amount of time from the first patrol to the second patrol, including any rest period.

Time allowed to start patrol is the time allowed by “On Guard” for the Guard to Commence his patrol by presenting his Tag to “On Guard”.

Maximum Patrol duration is the amount of time a Guard is allowed before downloading his tag upon patrol completion.

Siren Period sets the duration that the siren will sound for after an emergency action is initiated.

Important :

Site number. Program the units Serial number into this block.

The serial number can be found on the PC board.
This is important for identification of your On-guard if you plan to use the GPRS modem option.

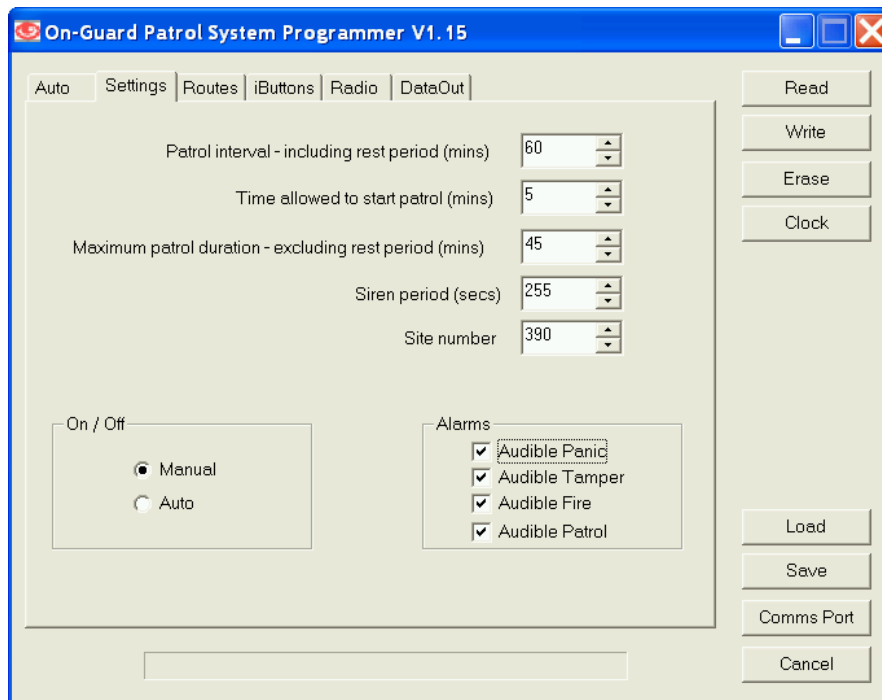


Fig 15

Tamper

“On Guard” has a built in tamper switch. If the cover is removed, The tamper event will be triggered and the EMERGENCY LIGHT will remain ON. This can only be re-set by presenting a SUPERVISOR TAG.

“On Guard” has a Panic and Fire input. Triggering either of these inputs will result in the EMERGENCY LIGHT staying on until SUPERVISOR reset

The Siren will sound if the Audible panic / Audible Tamper boxes have been checked.

MANUAL ON / OFF ... Refer to section 7 above.

Step 12. Setting up I-Buttons (Tags)

“On-Guard” can be programmed to accept 36 Guard iButtons and 6 Inspector iButtons.

You may operate “On-Guard” with any DS1994 I-button without first adding the Tags if the “Identify iButtons” check box is un-checked.

Note :

If the Identify iButtons check box is ticked, only recognised iButtons may be used with the “On-guard” so programmed.

Note :

On-guard assumes all iButtons are guard tags unless otherwise specified !

To add an iButton to “On Guard”, select the iButtons Tab, (Fig 16)

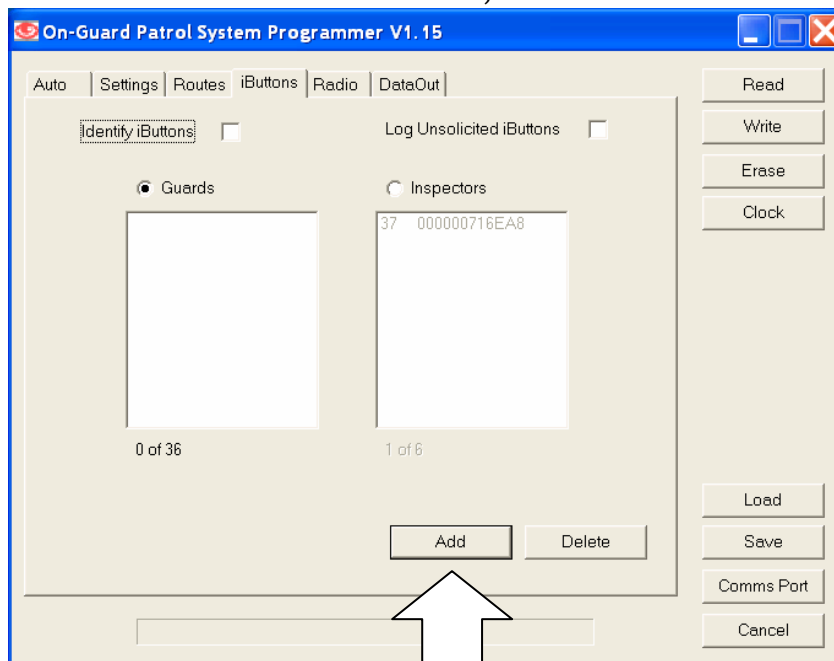


Fig 16

To Add a Guard, ensure that the “Guards” radio button is checked and then press the “Add” Button.

You will see a dialogue box as per fig 17.

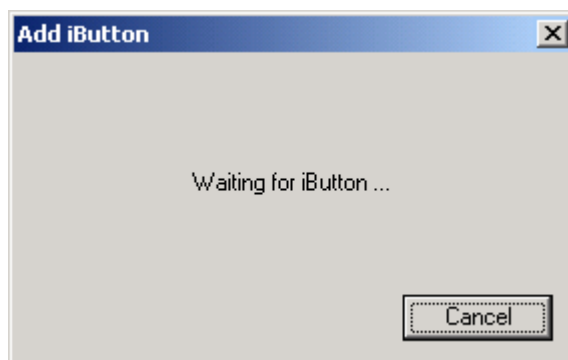


Fig 17

Press the iButton into the iButton reader on the side of “On-Guard”. On Guard will recognize the iButton and add it to the list in the left hand window of Fig 16. In the example above, the Tag number 716EA8 has been added as Inspector number 1.

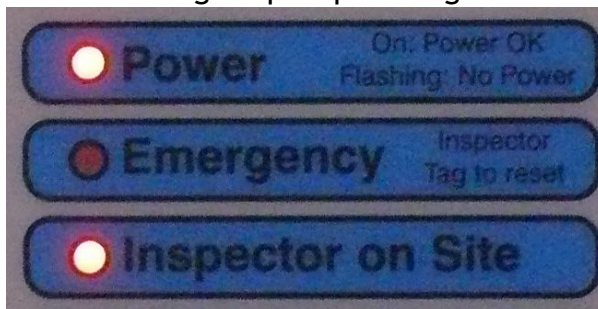
Continue adding your “Guard” iButtons and then add your “Inspector” iButtons by selecting the “Inspector” radio button as per Fig 18.

Six Inspector buttons may be added.

Note :

Inspector buttons can be used to switch On-Guard On and Off when the unit is not in a pre-programmed cycle. This is useful if an Inspector wants to perform a test patrol or demonstration .

Touch the inspector tag on the i-button reader, you will see the inspector on site LED light up as per image below.



Press the on button, indicated below :



On-guard will now commence operating.

Step 13. Radio / Tele-communicator programming.

“On Guard” has Nine programmable outputs.

“On Guard” can generate the following software events.

- Patrol Complete Pulsed
- Patrol Not finished Pulsed
- Patrol Not started Pulsed
- Wrong Route Pulsed
- Incomplete Patrol Pulsed
- Fire Pulsed

- Panic Pulsed
- Tamper Pulsed
- System on / off Pulsed
- **Patrol system on / off Stepped**
- **Inspector Stepped**
- **Mains fail / Restore Stepped**

The Software Events can be routed to any of the programmable outputs.

Fig 19 shows a drop down box next to each of the software events. Allocating a number to a event means that all events will be routed to that particular terminal connection.

Note : We recommend the following setup when using RDC 9 channel radios.

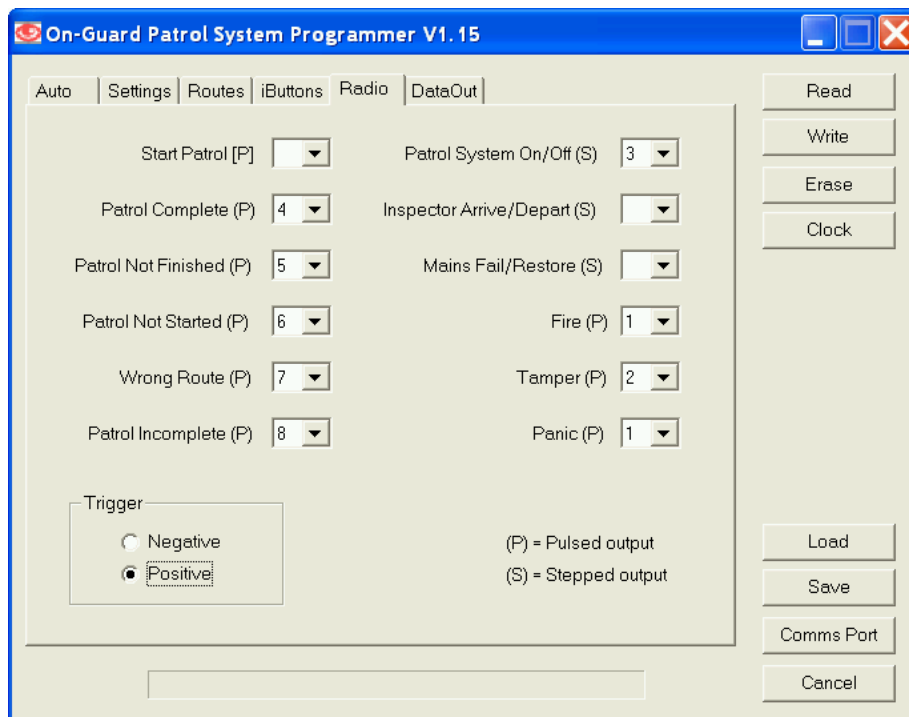


Fig 19

Trigger Polarity

The polarity of the output may be toggled as required by the radio to which “On Guard” is being interfaced. The above example shows the Trigger as Positive.

In the example above, “Start Patrol” is not being used. Patrol Complete events will be routed to Output 4
 Patrol not finished events will be routed to Output 5
 Etc.

Fire and Panic will be routed to Output 1

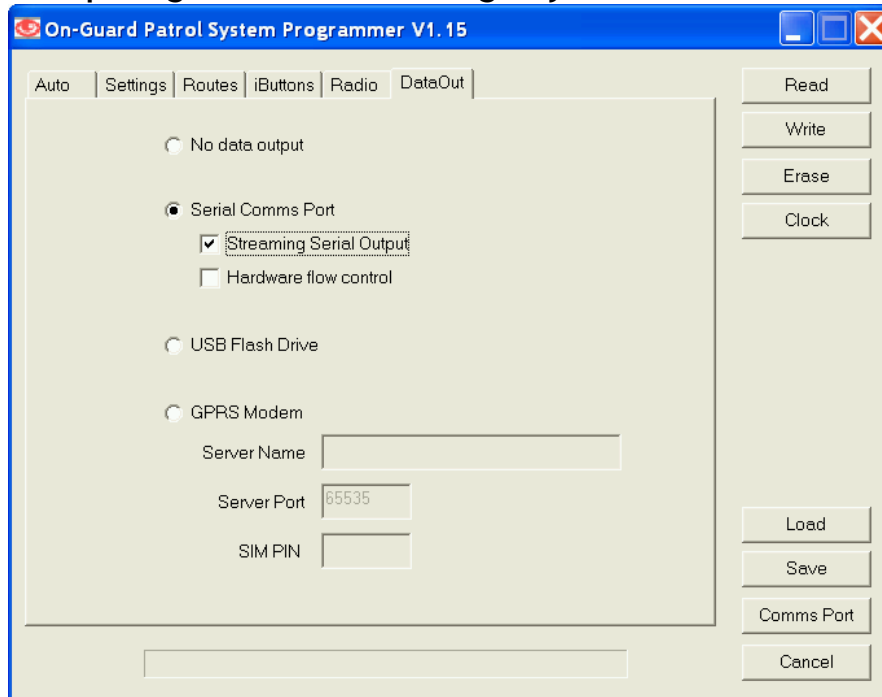
Using the above methodology, it is possible to connect “On Guard” to any Alarm radio transmitter, irrespective of the number of inputs the radio has. You are able to consolidate two or more software events to one output.

Important

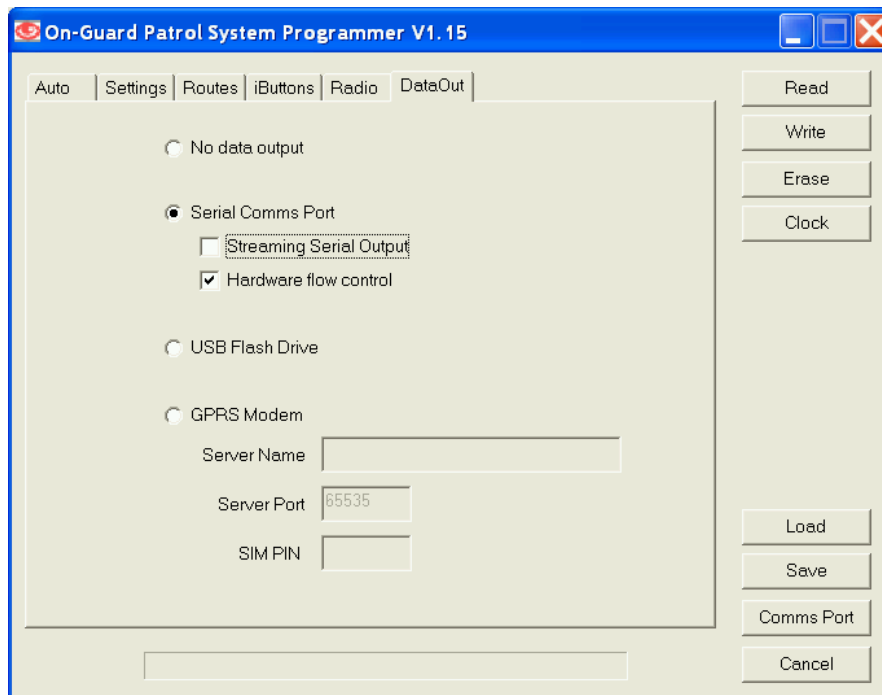
Do not bridge the terminals together This will damage On-guard.

Data Out. : Printer

Set-up On-guard in the following way to connect to a serial printer.



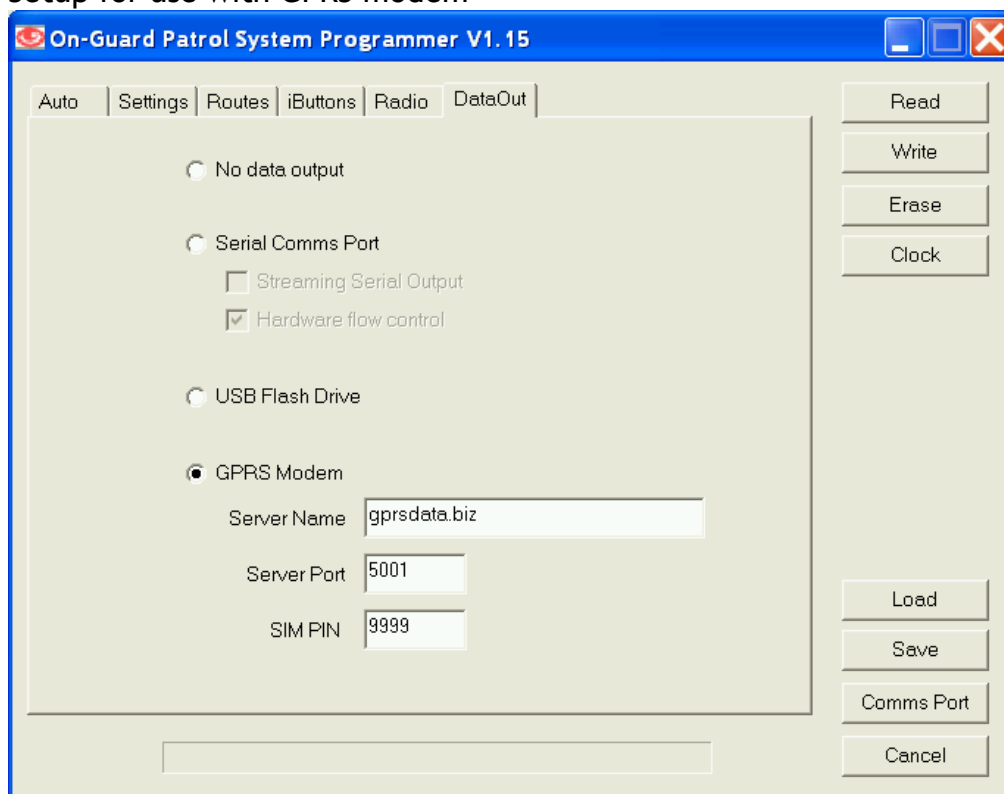
Store data in internal buffer for later retrieval.



Note Data may be extracted with OGMS software, downloadable from our web site. <http://www.onguard.co.za/downloads.html>

Note : Approximately two months data may be stored

Setup for use with GPRS modem



On-Guard Patrol System Programmer V1.15

Auto | Settings | Routes | iButtons | Radio | DataOut

No data output

Serial Comms Port

Streaming Serial Output

Hardware flow control

USB Flash Drive

GPRS Modem

Server Name: gprsdata.biz

Server Port: 5001

SIM PIN: 9999

Read

Write

Erase

Clock

Load

Save

Comms Port

Cancel

Important :

The Sim card PIN number needs to be entered in the SIM PIN location above.
The Sim card must have GPRS service availability.
The server port must be 5001
The Server name must be gprsdata.biz
The Serial number must be the serial number on the PC Board... see image below



Note :

When On-guard transmits it data to Our central Server , we will identify your site by its Serial Number number and allocate it accordingly.

Step 14. Writing the software to “On Guard”

After completing steps 1 to 13, you need to write the changes to “On-Guard’s “ microprocessor. Click on the “Write” button as per figure 20.

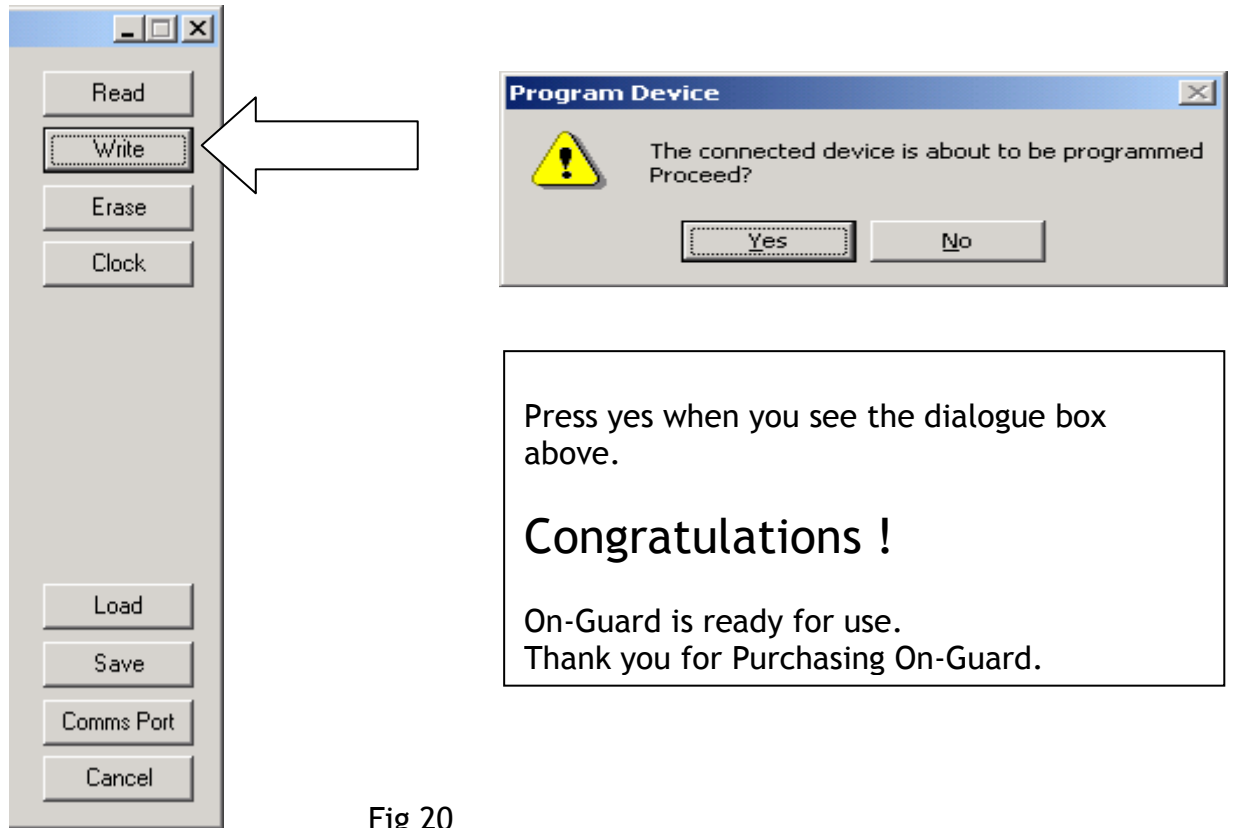


Fig 20

