CONTRONICS®

Guardus
Guard Tour System

Contronics® PROGuard
Guardus™ Management Software
User's Manual

PROGuard

User's Manual

PN: 300.000.30Eng
March 2007
Rev.07 –

Contronics Technologies LLC.
8121 NW 68th Street
Miami, FL 33166
USA
Phone: (786) 206 7892
(305) 994 3535
Fax: (786) 264 1040

E-mail: info@contronics.com
http://www.contronics.com

Contronics® and Guardus™ are registered trademarks of Contronics Technologies.
EM4100® and EM4102® are registered trademark of EM Microelectronic – Marin SA.
Dallas™, Dallas Semiconductor™, iButton™ and 1-Wire™ are registered trade marks of Dallas Semiconductor; Microsoft®, Windows® are registered trade marks of Microsoft Corporation

Contents

Introduction

Welcome to PROGuard, the management software for the Guardus system.

The PROGuard Application Program enables you to access the most advanced features of your Guardus. With it you can change programmable options of Guardus and view or print the data recorded by it during its use, for example, the time the guard was at a round control point.

Note:

*The descriptions given in this manual will employ standard terms, which relate to the functioning of the electronic guard: "Round Control Point" (place the guard must visit and inspect), "Round Cycle" (complete reading of all **iButtons/TagRF** specified); "Guard", etc. These terms may be changed according to the area of application. The procedure is described in special features.*

Installation

Minimum requirements for PROGuard Installation

- IBM PC (or 100% compatible) with equivalent to Pentium I 300 MHz CPU or above
- Minimum of 10 MB free disk space
- Standard RS-232 serial communication port (in this case the Serial Communication Cable or Download-i Serial must be used) or USB port (in this case Download-i USB must be used).
- Operating System Windows 98SE, Windows 2000 or Windows XP.
- CD-ROM reader

PROGuard is usually provided on CD-ROM.

Installing PROGuard

Before using PROGuard, it needs to be installed on your computer. The installation process is fast and simple, easily run through the installation program.

PROGuard installation software is supplied on CD by Contronics or by an authorized distributor. It may also be downloaded from Contronics website (www.contronics.com) or by the PROGuard automatic updating feature. For this, an older version of PROGuard must be installed on your computer.

Regardless of the way in which PROGuard is installed, confirm with Contronics or with your authorized distributor that you have an authorization or license to do so. Non adherence to this recommendation may imply a breach of copyright or the running of an illegal copy of the software.

If you are installing PROGuard from a CD, insert the installation CD into the CD drive of your computer and the auto-start program will run automatically.

The following window will be displayed:

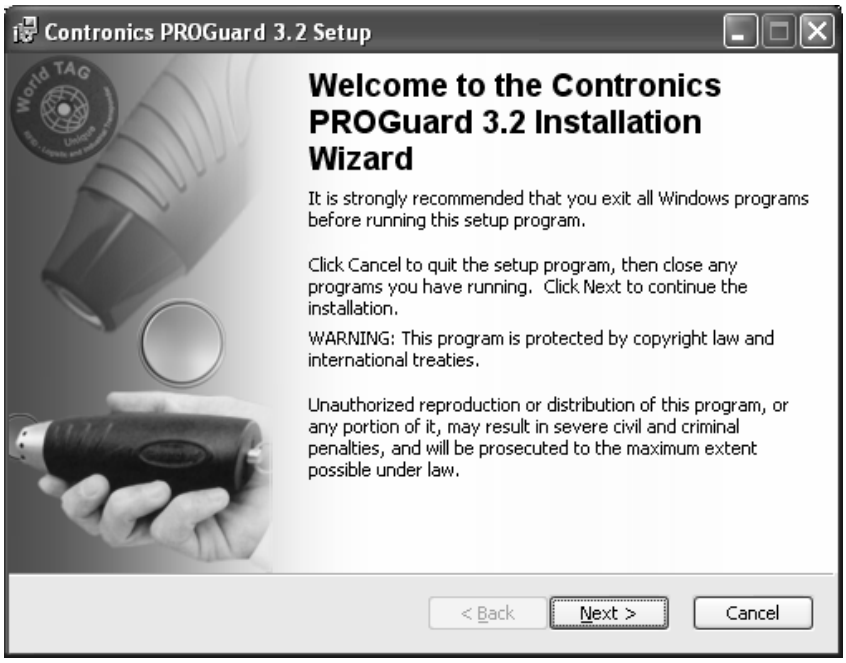
If this doesn't open automatically, double click on the icon 'My Computer' and then on your CD drive, then double click on the icon 'Contronics.exe'. If desired choose the language, then click 'Guardus Line – Software – PROGuard – Install' on the screen.

If you are installing PROGuard from an installation file obtained through the 'download' from the Contronics website, simple run this file.

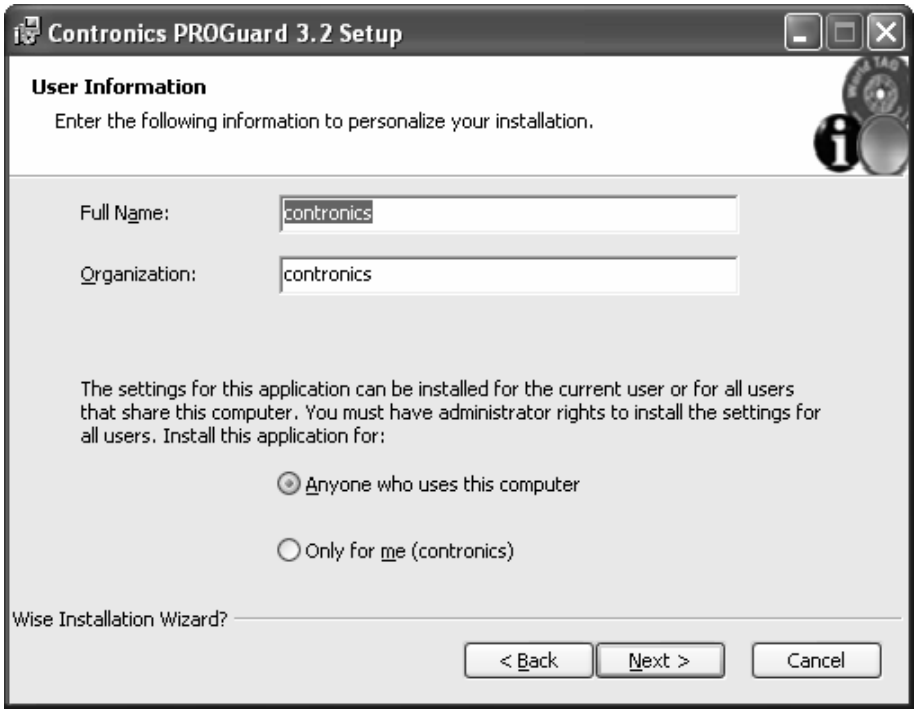
Important:

If you have older versions of PROGuard installed in your computer, when installing the new version of PROGuard the installation program will automatically remove the previous version of the software.

The installation process will proceed displaying the following window:



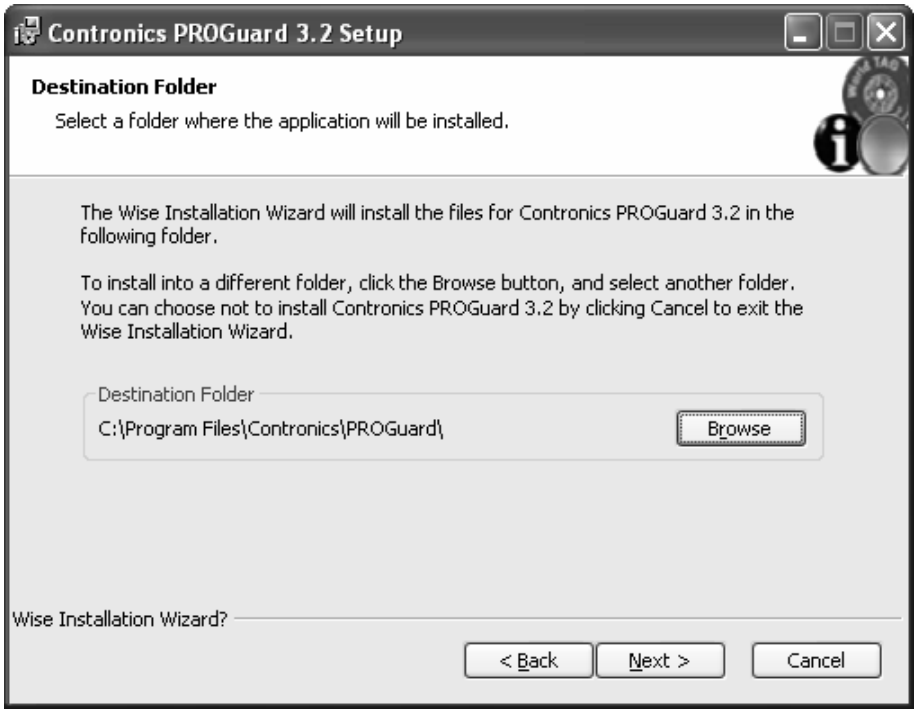
Click on 'Next'. The following window will then be displayed:



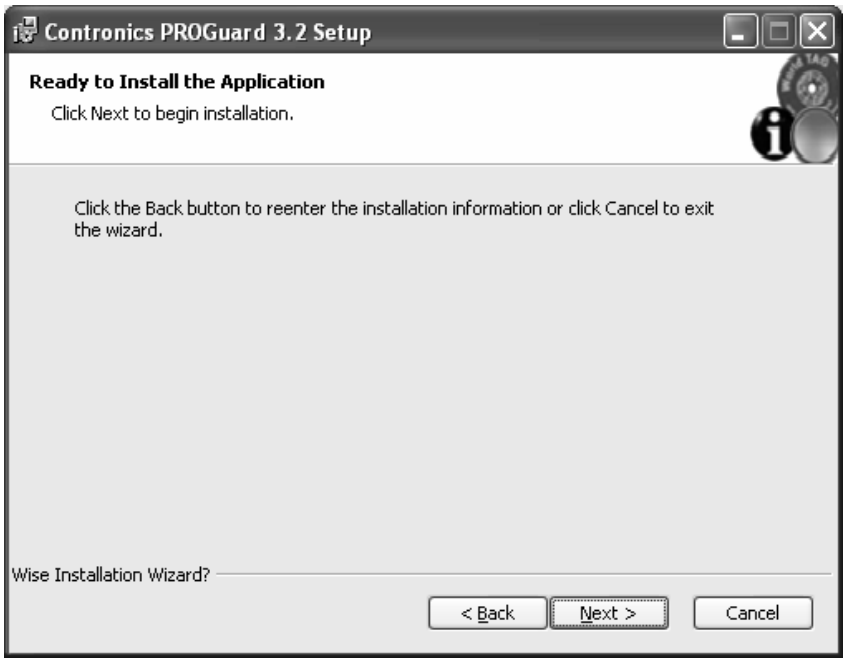
Type your full name and your company name, according to the user license which is supplied by Contronics or an authorized distributor. Select whether you wish PROGuard to be run by only yourself or any other authorized user of this computer. Note, however, that in order to be able to select the latter installation option, you will need to seek permission from the computer manager.

Then, on clicking the 'Next' button, you will be asked in which directory the PROGuard will be installed. We suggest that the directory used for the installation is:

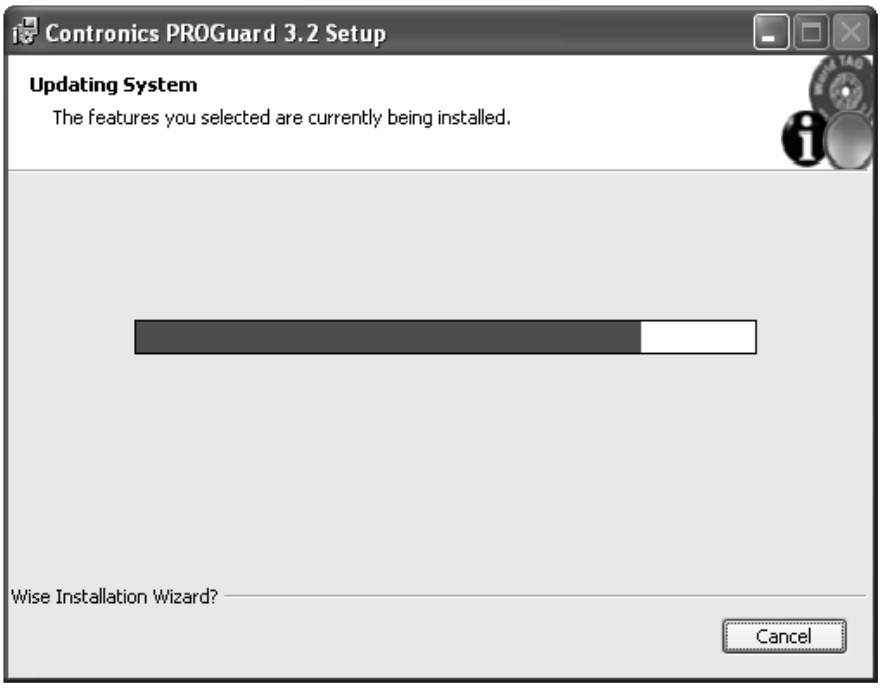
"C:\Program Files\Contronics\PROGuard".



Click on 'Next'. The following window will be displayed, indicating that the required files are about to be copied.



Click on 'Next'. The PROGuard installation will start and the following window will be displayed.



When the installation is completed, the following window will be displayed. Click on 'Finish':

PROGuard is ready to run on your computer.

Optional Equipment and Accessories

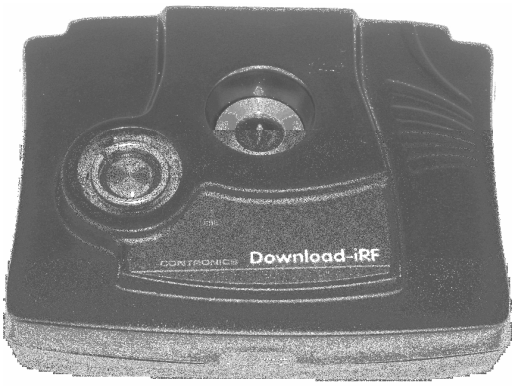
Guardus G3
Uses iButtons.

Guardus G5
Uses iButtons and TagRF

iButtons
Can be 3mm or 5mm thick.
Can be mounted on fixed metal plates, on personnel identification badges, or on key rings.
Each iButton has a unique serial number which is read when touching the **Guardus** reader head.

TagRF
There are many shapes, models, sizes and brands.
Each TagRF has a unique serial number which is read when the **Guardus** reader head touches it.

Nylon Holster
Utilized for **Guardus** protection and support.



Download-iRF:

The Download-iRF downloads information collected by **Guardus** locally, directly to a PC through its USB port.

Numerical Events Keypad

This accessory is composed of a leather wallet with 12 iButtons which are identified by the numbers 0 to 9 and also the keys CLEAR and ENTER. This keypad allows the gathering of information for the PROGuard software reports. Through PROGuard different events can be recorded, each one being represented by a coded number, which can be of a single unit or of combined numerical units (tens, hundreds, thousands).

CD-Rom with PROGuard software

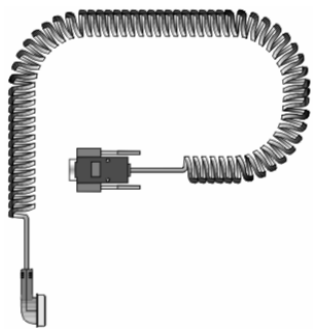
This CD has, apart from the PROGuard software, many other files, including the management software for the whole system, Download-i USB installation drivers, and others.

Master iButton

This is used to check, without the aid of a PC, whether the guard is carrying out his rounds according to the **Guardus** program.

Round control point
iButton mounted on a fixed metal plate.

Guard iButton
Button to be placed on the employees member's or patrol officer's badges.



Serial Communication Cable
Downloads the **Guardus** data to a PC through the PROGuard software.

Serial Download-i
The Serial Download-i downloads information collected by **Guardus** locally, directly to a PC through its serial port.

Connect-i

Connect-i integrates the electronic round controlled by **Guardus** with any monitoring center through an alarm panel. Connect-i is an accessory which adds great value to the electronic round control since it allows the support personnel to follow, in real time, the activities carried out by the guards, thus dispensing with the need for constant visits by a supervisor to check on the work carried out by the patrol officer.

Remote-i ISP

Remote-i ISP sends the downloads, via Internet, to an access provider, which immediately redirects them to your PC. This makes it possible for the **Guardus** download to be carried out from anywhere in the world at the cost of a local call.

Download-i USB

Download-i USB downloads information collected by **Guardus** locally, directly to a computer through its USB port.

Remote-i

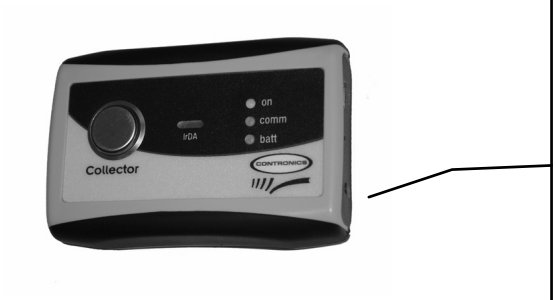
Remote-i sends the information of the downloads carried out by **Guardus**, directly to a PC, through an external modem connected to a telephone line. The modem recommended by Contronics is U.S. Robotics 56K (acquired separately).

Remote-i Modem

The Remote-i Modem has the same features as the Remote-i, with the advantage of having a built-in modem.

Remote-i Net

The Remote-i Net enables the carrying out of downloads from **Guardus**, through your local network, or even from an Internet connection.



Collector

Collector is **Contronics**' new portable downloader. Carried by a supervisor visiting the patrol officers on sites, **Collector** can retrieve data from **up to 510 Guardus** devices. This new product enables the supervisor to collect data from **Guardus** on the field and to download all of them to **PROGuard** at once when he is back to his station via USB port.

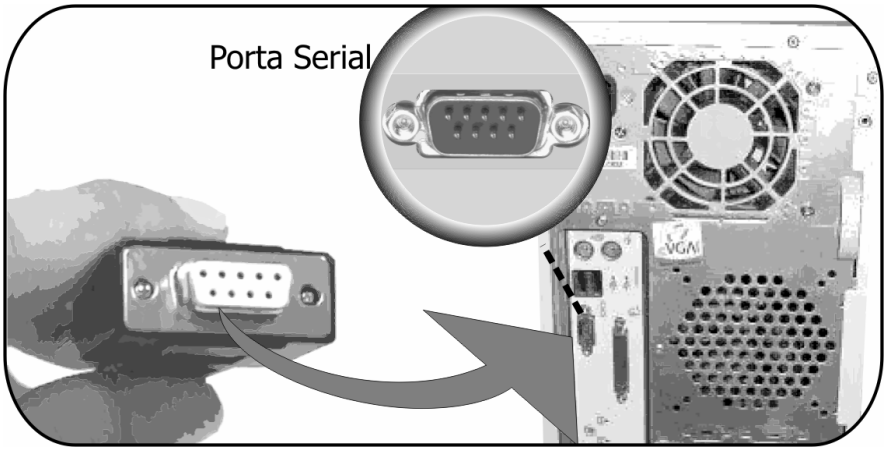
Preparing to Run PROGuard

In order for PROGuard to run optimally an interface needs to be properly connected to your computer. The interfaces available are a Serial Communication Cable, Download-i Serial and Download-i USB.

Connecting the Serial Communication Cable

The serial communication cable must be connected to the standard RS-232 serial port of a computer.

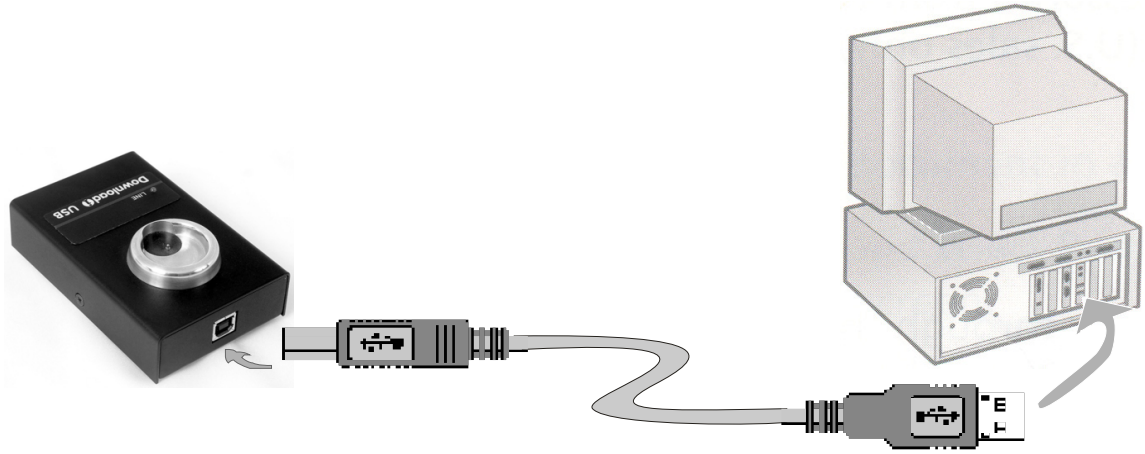
Find the appropriate connector (normally at the back of the computer), and make the connection as shown in the figure below. Note that it may be necessary to use a 9 to 25-pin serial adaptor (not supplied by Contronics).



The connection must be made in the same way if a Download-i is used instead of a serial communication cable.

Connecting Download-i USB

The Download-i USB must be connected to the USB port of your computer as shown in the figures below:



Also, the driver (software) supplied by Contronics must be installed before the PROGuard installation. If you have not yet installed it, interrupt the PROGuard installation. The instructions for the installation of the USB driver are in the document 'Download-i USB - Installation Guide', a small leaflet which comes with the Download-i USB. Make sure that all of the instructions are followed.

Running PROGuard

Through the Windows 'Start' menu access the sub-menu 'Programs', where the 'Contronics PROGuard' command will be available. Select this command by clicking the mouse or keying in ENTER.

TIP:

If you have opted to include the program icon on the desktop, double click on it.

Use

Using PROGuard

PROGuard Initial Window

As you start the running of PROGuard you will see the following window:

This window allows you to select the origin of the data to be viewed through the following options:

- **Download Guardus:** allows direct access to the data stored in the Guardus memory.
- **Latest downloads:** allows the viewing of the latest downloads from each Guardus to your computer.
- **Previous Downloads:** allows the reading of older downloads, which have been recorded automatically by PROGuard in its temporary backup.

- **Backup Downloads:** allows the reading of previous downloads through the PROGuard backup option, accessible in the initial window in the 'File' menu.
- **Consolidate downloads:** enables the emission of a report which includes data collected from multiple Guardus wands. Through this option data originating from several Guardus wands, which may even have different programs, can be viewed in the same report.

Using the 'Files', 'Tools', 'Update', 'Interface' and 'Help' Menus

In the 'File' menu you can view the following options:

- **Create Backup:** allows the creation of a backup copy of previous downloads. It is recommend that the backup is created in a storage environment external to your computer (for example: diskette, pen driver, removable hard drive or another computer connected to the network).
- **Clear previous Downloads:** clears all files whose name has the format GRDxxxxx.XXX, where xxxxx are the last digits of the Guardus serial number and XXX is a number between 000 and 999. These files are found in the Download directory. See a more detailed explanation regarding these files later in this manual. **We recommend that this command is only used after a backup has been created.**
- **Select external backup directory:** allows the selection of the place where the backup data are to be saved. The item 'Creating backups on disk' details the procedure necessary to create backup copies of the data.
- **Update list of downloads:** allows the updating of the list of downloads displayed by PROGuard. It is mainly useful for changing floppy disks, when viewing external backup data.

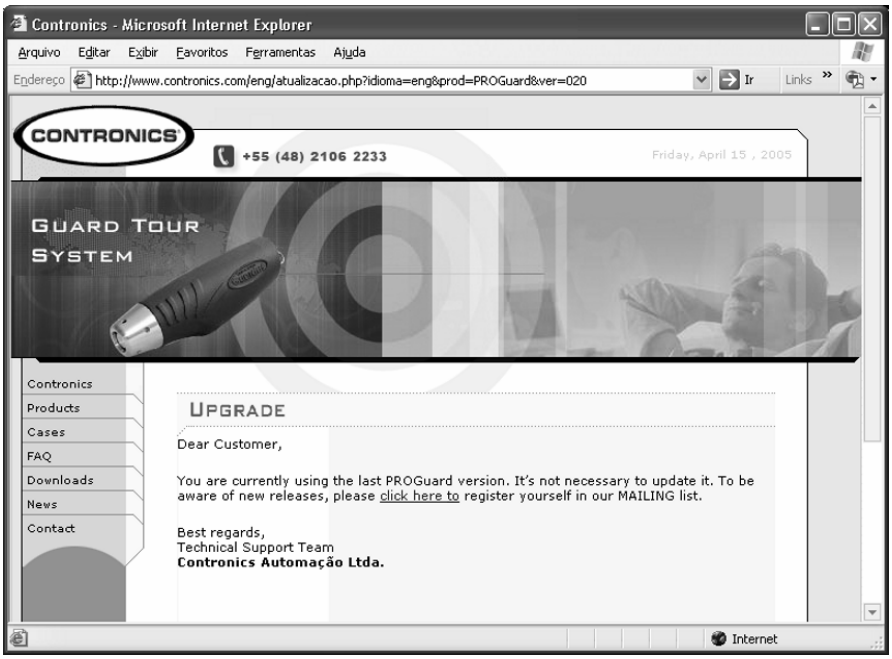
- **Exit:** allow the exit of programs, that is, PROGuard will be closed.

In the menu 'Tools' you will view the following option:

- **Configure PROGuard:** allows you to configure Guardus to work with other applications which are not the rounds application. Further details of this operation can be seen in the item 'Configuring PROGuard'.

In the menu 'Update' you will see the following options:

- **Update PROGuard:** through this option you can see whether there are updated versions of the download software. This is done on-line and you must therefore be connected to the Internet.



Update Guardus: through this option you can update the Guardus firmware. Firmware is the software inside Guardus which can be replaced or updated. The updating of Guardus firmware may add new features which will not be included in this manual.

PROGuard has a mechanism which automatically checks the need to update the Guardus firmware which is to be downloaded. The updating should only be carried out if necessary.

Note:

Should the Guardus firmware be compatible with the PROGuard version a message informing that the update was not carried out will be shown.

Important:

Never remove the Guardus from the interface during the firmware updating process, nor interrupt, for any reason, this operation. The non-compliance to this recommendation may damage Guardus.

In the 'Interface' menu will can see the following options:

- **Serial:** used to read a Guardus program through the serial communication port. This option needs to be selected if you are using a Serial Communication Cable or Download-i Serial interface.
- **USB:** used to read and program Guardus through the USB communication port. This option must be selected if you are using the Download-i USB interface.

In the 'Help' menu you will see the following option:

- **Contronics on the Internet:** allows you, who has an Internet connection available, to get to know Contronics through its Website.

Downloading Guardus

To download a Guardus, after clicking on the 'Download Guardus' option in the initial window, click on the option 'Read Guardus' with the left mouse button.

On doing so, PROGuard will request, through the message to the side, that Guardus be placed in contact with the communication interface.

If you have a Serial Communication Cable, fit the small device at the end of the cable, similar to an iButton, onto the Guardus reader head, as if you were in fact making contact with an iButton. Hold firmly with the hand as shown in the following figure.

The downloads may originate either from a 'serial communication cable' or from table devices.

Should you have a Download-i, fit the Guardus reader head onto the Download-i contact base. For this procedure it is not necessary to hold it. Observe that a proper contact is very important so that the communication is carried out rapidly and without problems.

Note:

For the option 'Read Guardus' to function, the communication cable, or a Download-i, needs to be installed correctly. See how to do this in the section 'Preparing to run PROGuard'.

The Guardus reading will be completed (downloaded) by your computer when its head touches the communication interface. The download time varies according to the amount of data stored in the equipment, not taking more than 20 seconds.

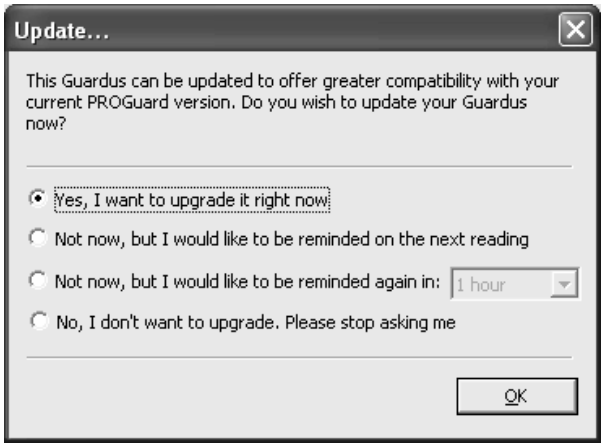
After downloading all of the data, the PROGuard will display a reports screen, through which it is possible to view and print seven types of reports:

- Monthly report;
- Exceptions report;
- Activity Map Report;
- Full report;
- Frequency report;
- Rounds report;
- Statistics Report
- Programming report.

With the exception of the Programming Report, there are, for all of the other reports, the options to 'Print' and 'Export'. These buttons are located in the top left corner of the window. On clicking on one of them it is possible to print the desired report or export it to a text file.

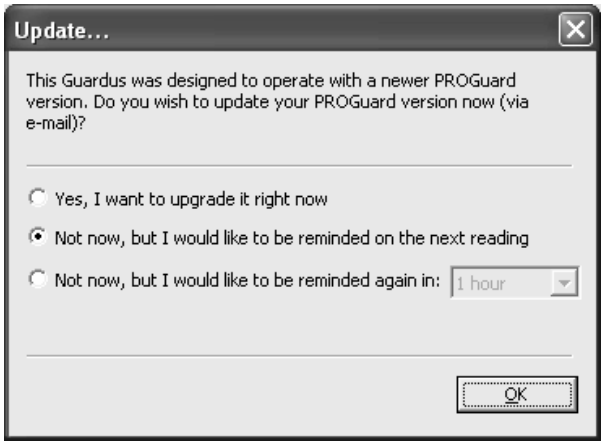
Automatic Update

Whenever a Guardus is downloaded, the PROGuard checks its firmware. If it finds that the Guardus has old, outdated and inadequate firmware, PROGuard will automatically start the firmware update procedure as shown in the window below.



Should you not wish to update at the moment, select the option 'Not now, but I would like to be reminded again in ...' stating beforehand the deferment time and then click on 'OK'.

If PROGuard identifies that the Guardus has firmware of a more modern version than itself, then, automatically, PROGuard initiates the auto-update procedure. The following window is shown: (Note that we are updating PROGuard).



As in the previous case, if you do not wish to update at this time, you can request the deferment through the 'defer' option with the required period of deferment selected from the list.

Events and Control Records

The 'Monthly', 'Exceptions' and 'Full' reports show some special records, called control records. They contain information additional to the guard's activities such as, that Guardus was downloaded onto a computer or the battery charge level at a particular time.

The information obtained through the numerical events keypad or **iButtons** is also considered as control records.

For this reason, it may or may not be listed in the reports, according to the status of the box 'omit events'.

The control records will always be identified by the initial sequence '>>>', which identify situations relating to the rounds in them, and are important for a full comprehension of the reports.

Examples of control record indications:

- Guardus was switched off;
- A check has been made with the master **iButton/TagRF**;
- Reading of employees **iButtons/TagRF**;

The Guardus clock was set fast causing a period of time without control rounds.

The indication or suppression of control records is determined by the state of the box 'Omit control records (>>>)'.

Reports

Monthly reports

The monthly report is probably the most used in the majority of Guardus applications and for this reason it is automatically displayed when the reports screen appears for the first time.

However, it is possible to access it through another report by clicking on the 'Monthly' guide on the reports screen. It can be used to quickly check, in a certain month, with the help of the indication of its calendar, on which days round problems occurred and which type of problem they were.

The following are considered as round problems:

- Rounds which were incomplete or not carried out;
- Events recorded through numerical keypad **iButtons**;
- Time periods in which Guardus didn't work (had no power or its clock was set fast)

These same occurrence are also displayed in the 'Exceptions' report.

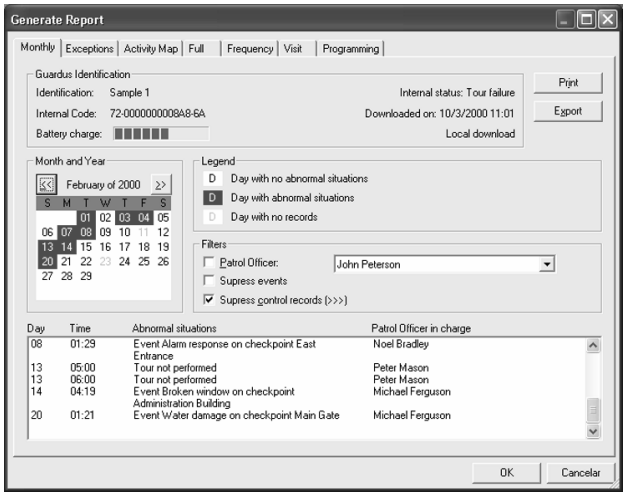
The monthly report can be filtered to indicate only the guard who carried out the rounds, the month in which they were carried out, or even, to include numeric events and control records (identified by the sequence '>>>').

In order to print or export this report, check the items *Printing reports* or *Exporting reports* in this section of the manual.

Note:

The PROGuard reports do not need, necessarily, to be printed since they can be checked on the computer screen.

Next, we will show an example of a monthly report screen:



This report contains, along with the data listed in the lower part of the screen, four groups of fields:

- 'Guardus Identification';
- 'Month and year';
- 'Key';
- 'Filter'.

Guardus Identification

In the 'Guardus Identification' group (common to all reports) the following data are listed:

- **Identification -** descriptive text which must be used to identify Guardus. Initially, each Guardus is identified by the text 'Guardus' along with its internal code or serial number. In the example above, we would have 'Guardus 8A8' as the default. This default description has been changed to 'Example 1 '.
- **Internal Status -** this may show two messages:
  - 'Round Failure': There was a failed round at the time Guardus was downloaded. This failure had still not been reported to the supervisor or the reports originating from

the previous downloads from this particular Guardus did not show this information.

- 'Rounds carried out': At the time Guardus was downloaded, there were no failed rounds which had not yet been reported to the supervisor.

Note:

Guardus will signal 'Round failure' if at least one round has not been concluded or if the guard has disconnected the battery. After signaling 'Round failure', on reading the master ***iButton/TagRF,*** *if all rounds were carried out completely, Guardus will signal 'Rounds Completed'. On signaling 'Round Failure' Guardus will in fact signal 'Rounds Completed' after the following conditions*

- *Guardus read the master* ***iButton/TagRF****, and then at least one checkpoint was visited according to a previous Guardus programming.*
- *Guardus was downloaded to a computer and its data read by PROGuard.*

After one of the above conditions occurs Guardus will continue to indicate 'Rounds completed' until a new problem with the rounds occurs.

- **Internal code:** is an internal Guardus identification, registered at the factory and unalterable. It always begins with 72, followed by the equipment serial number, and it ends with two verification digits. Note that, since it uses hexadecimal notation, the internal code may contain, apart from numbers, the letters A, B, C, D, E and F.
- **Downloading:** shows the date and time at which the data shown were downloaded.
- **Battery level:** this field indicates visually, in percentage terms, the battery charge level of the Guardus. Through this

field it is possible to monitor the battery lifetime and visualize when the battery will need to be changed.

- **Download origin:** The origin of the download may be local or remote. In the latter case the means by which the download was received will be indicated (via Remote-i for example).

Month and year

In the 'Month and Year' group there is a calendar indicating the days when round problems (or occurrences) took place. To the left and right of the month and year, shown by the calendar, there are two buttons identified by arrows pointing to the left ('<<') and to the right ('>>').

These buttons allow the viewing of records previous and subsequent to the current month displayed on Guardus. If there are no records, the buttons will be deactivated. In the given example, there are records for the months of January, February and March. Thus, the buttons '<<' and '>> are activated.

Key

In the 'Key' group there are three forms of calendar identification:

- The days displayed in black letters on a white background indicate normal days, without occurrences (Round failure, events recorded, etc.);
- The days displayed in white letters on a colored background (red), indicate days when occurrences were recorded.
- The days for which there are no Guardus activity records are displayed in light gray letters on a white background. These may be days whose data have already been lost or are too old, days in the future, or days on which Guardus was switched off (no power).

Filters

In the 'Filters' group, there are options which can be activated or deactivated in the data selection for reports. These are:

- **Guard:** when selected the list will give only records related to the guard selected from the list to the right of the box. This option will be available only when, effectively, the guard **iButtons/ TagRF** are used.
- **Omit events:** when selected the events displayed in the report are not shown, thus restricting the number of occurrences listed.
- **Omit control records (>>>):** when selected all control records (beginning with the sequence '>>>') are omitted from the reports. As with the 'Omit events' filter, this filter restricts the number of occurrences listed, facilitating, in many situations, the report analysis.

The report lists the data in time sequence. On each line an occurrence is listed including the day, the time, a description of the problem which occurred and the guard responsible.

Note:

*In the PROGuard reports the guard considered as the one 'responsible' is the guard who last had their **iButton/TagRF** recorded before the problem occurred. In order to determine their identification, just activate the option 'Demand identification of the guard at the beginning of each round' (Advanced Programming guide).*

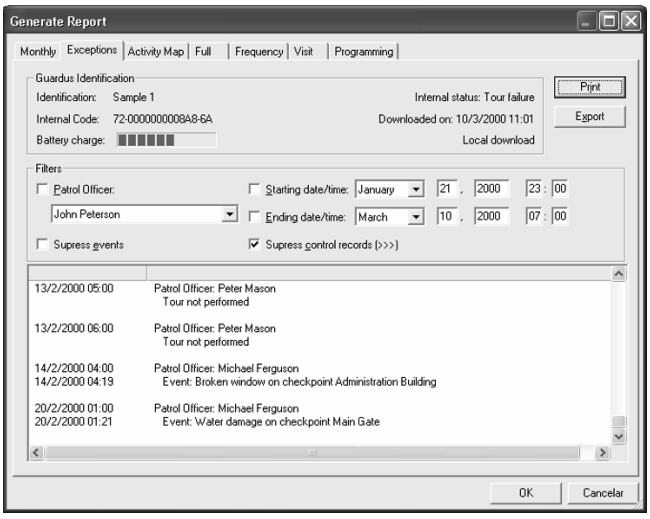
Exceptions Report

As with the monthly report, the exceptions report shows the problems which occurred on the rounds, however, with two basic differences: the exceptions report is not limited to a period of one month and it enables the supply of a greater level of detail, for example, it lists the non visited points for what is considered an incomplete round. In order to access the exceptions report just click on the guide 'Exceptions', in the 'Reports' window.

This report can be filtered, listing only the data collected by a specific guard, data collected within certain dates, which can include, or not, numerical events and control records (identified by the sequence '>>>').

To print or export this report, consult the items *'Printing reports'* or *'Exporting reports'* in this manual.

The Exceptions Report window is shown below:



A description and the meaning of the groups 'Guardus Identification' and 'Filters', and also the way in which they can affect the reports, can be found in the Monthly Report item.

The exceptions report offers another two filter options: 'Start' and 'End', which work as follows:

- **Start:** allows you to set from which start date and time you wish to see the listed records. Initially, 'Start' is filled in from the oldest Guardus record.

- **End:** allows you to set the end date and time of the listed records. Initially, 'End' is filled in up to the current date.

Tip:

Always try to alter the start and end dates and times with the respective filters switched off, thus avoiding, when modifying the day and moving on the month field, that the report is recalculated. After having adjusted the dates and times, switch on the desired filters.

In the list of data in the report, the exceptions detected, followed by the date and time by which they are identified, are given.

Note that for a round which is incomplete, or not carried out, the time shown will be that at which this round was scheduled to start. This facilitates the identification of the failed round.

Should you not be working with guard **iButtons/TagRF**, the rounds will be identified by the text 'Guard: <not identified>'. When the guard **iButtons/TagRF** are being used, the rounds will be identified by the name of the guard who was supposed to carry them out.

In the case of incomplete rounds, the missing points will be listed (as for example in the previous window, 'Missing point: Main Gate'). The control records will always be presented on a separate line and will not be related to rounds taking place at that time.

Activity Map Report

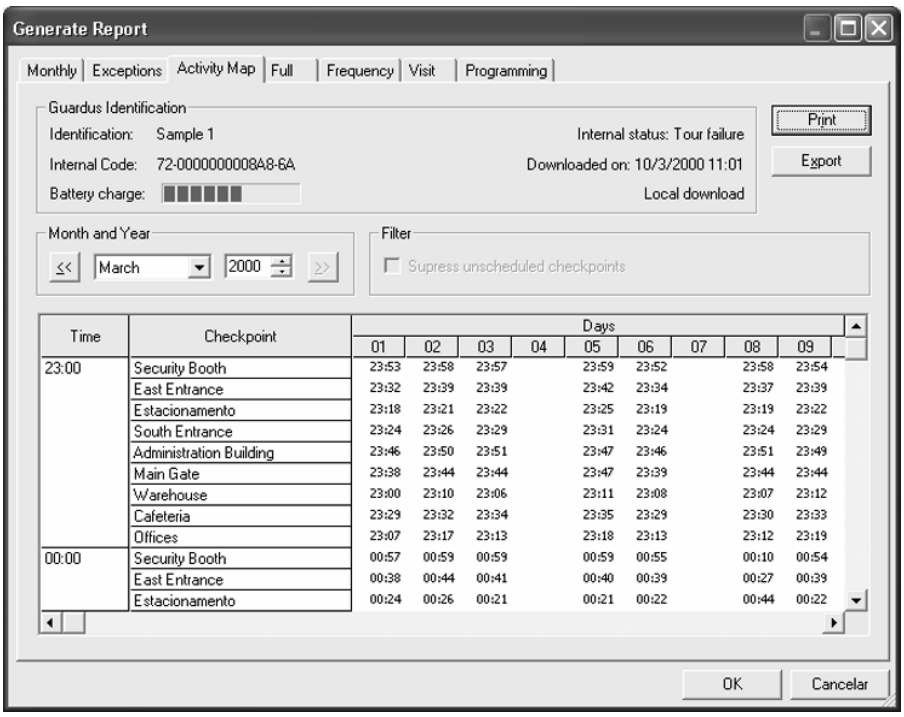
This report allows you to have, in a simplified way, an overall view of the rounds carried out over a month with the times at which each point was visited, or a blank space if it was not visited. These blank spaces make it very easy to see when rounds were not carried out, partially or totally.

A description and the meaning of the groups 'Guardus Identification' and 'Month and Year', and the way in which they affect the reports, can be found in the item Monthly Report.

This report is organized in the following way: for each round schedule there is a line for each checkpoint; there is a column for each day of the month. At the intersection of these lines and columns there is, or not, a time indicating when a certain checkpoint was checked, within a certain round schedule of a certain day of the month.

If the intersection is blank, this means that the checkpoint was not checked on that day, during that round schedule.

The window showing the Activity Map Report is displayed below:



If Guardus has been programmed to accept checkpoints outside the scheduled time, these can be included in the two following ways: either within the scheduled round which included the contact with the **iButton/TagRF**, or in a schedule which is not available and will show in the report as N/A. Also, all of the checkpoints checked outside a certain schedule will be marked with an asterisk (*) directly after its identification, indicating that the checkpoint was not expected in that round schedule.

In the 'Filter' group, there is an option which allows the viewing in the report of the checkpoints recorded outside the schedule to be left out.

Tip:

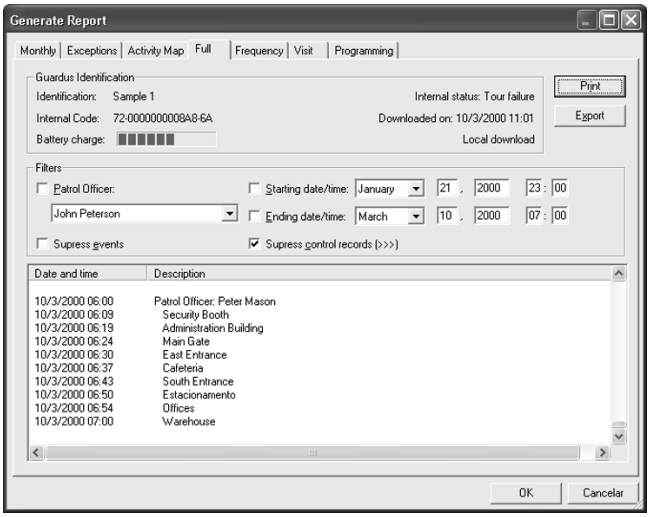
If the descriptions used for your checkpoints are too long, their appearance in the printed activity map report may suffer. In this case, select, from the 'Properties' button of the dialogue box 'Print' the page orientation 'landscape'.

Full Report

The full report shows the total records of everything that occurred on a Guardus. All of the **iButtons/TagRF** which were read by that Guardus and all of the situations which it may indicate through sound or light signals are listed. Only through this report is it possible to organize a complete history of the activities of a Guardus.

This report may be filtered by: the guard who carried out the rounds, the interval of dates in which the rounds were carried out, numeric events and control records which are identified by the sequence ('>>>') can be included or not. In order to print or export this report, consult the item *'Printing reports'* or *'Exporting reports'* in this manual.

The Full Report window is shown below:



A description of the groups 'Guardus Identification' and 'Filters', with their meanings and how they affect the reports, can be found in the items *Monthly Report* and *Exceptions Report* in this manual.

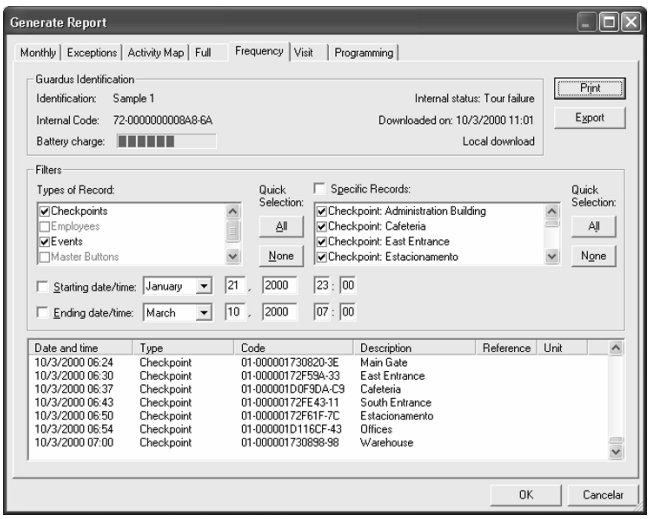
In the item *Exceptions Report* the behavior of the group of filters indicated by 'Period' is also described.

All **iButtons/TagRF** read by Guardus, all the abnormal situations detected (such as battery disconnection) and all the rounds carried out (or not) are listed in the Full Report, along with the corresponding date and time. As with the Monthly and Exceptions Reports, the rounds are identified by the Guards who were supposed to carry them out (that is, the last guard to be identified by the Guardus through their **iButton/TagRF**). Rounds which were not concluded will be identified at the end, by lines reading '***Round incomplete***' or '***Round not carried out***'.

Frequency Report

The Frequency Report shows the frequency with which the **iButtons/TagRF** were read by Guardus. In this report the date and time of the **iButtons/TagRF** reading, the **iButtons/TagRF** type, the internal code and the description adopted by the user will be listed. When the **iButton** is of the numeric type or for a numeric event, then the reference and the corresponding unit, if previously informed, will be shown in the report.

The Frequency Report window is shown below:



You can filter this report by each type of **iButton/TagRF** or by groups of them. The meaning of the groups 'Guardus Identification' and 'Filters', their descriptions and the way in which they affect the reports, are analogous to the items *Monthly Report* and *Exceptions Report*.

This report, however, has some differences in the filters in relation to the other reports since it does not concentrate on the rounds themselves, but rather, on the **iButtons/TagRF** which were read. Thus, since it does not show events as a normal record and does not show control records, the Frequency Report does not offer the filters 'Leave out events' and 'Leave out control records (>>>)', and, instead of allowing the filtering only of the guards, all types of **iButtons/TagRF** are filtered through the following list:

- **Record Types:** you may select here the **iButtons/TagRF** types to be listed. The PROGuard allows all types of **iButtons/TagRF** to be listed, or specified groups of them, as, for example, guard, employees or master **iButtons/TagRF**, events or subsets of these.
- **Specific Records:** here you can select those **iButtons/TagRF** of each type which are to be listed. In order to carry out the filtering, after selection activate the 'Specific Records' box. Thus, the report will show only the selected **iButtons/TagRF** or events.

Tip:

The buttons 'All' or 'None', in the item 'Rapid Selection', accelerate the tasks which require all the records to be activated or deactivated.

To print or export this report, consult the items *Printing reports* or *Exporting Reports* in this manual.

Rounds Report

The Rounds Report aims to highlight the activities which occurred at each checkpoint. Among these activities are the control point reading carried out by the guard (identified or not) and the events which were registered at that point. This report also offers the possibility to determine the time for which the guard remained at each of the checkpoints.

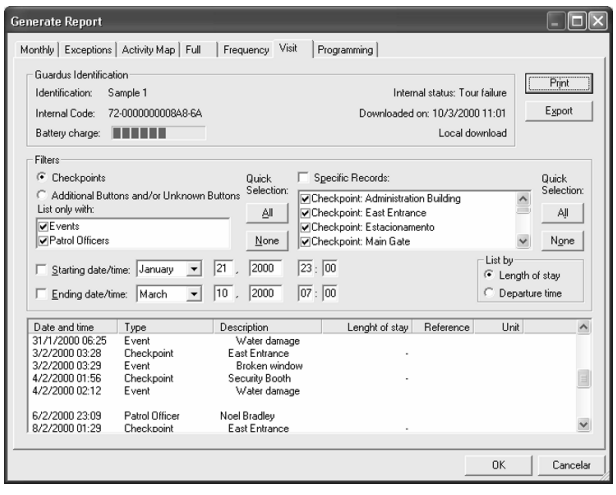
This time is called the Length of Stay and is determined by the difference between the reading carried out by the guard on arriving at the checkpoint and that carried out on leaving this point. Thus, the report can list the guard associated with the checkpoint, the events registered at that point and the time for which the guard remained there.

The Length of Stay is given in the report in minutes.

Note:

The Length of Stay can only be determined if the options 'Accept checkpoints outside the schedule' and 'Allow the revisiting of points within one round' are activated in the 'Advanced' programming window. Only with these options activated can Guardus allow the guard to record the reading carried out on arriving and leaving each checkpoint.

The Rounds Report window is shown below:



Note:

Should the guard record only his arrival at or departure from the checkpoint, in the Length of Stay field the signal '-' will be shown. This signal indicates that the Length of Stay cannot be determined. The signal '-' must therefore be interpreted as the recording of only one reading of the checkpoint.

In the report the date and time of the reading of the **iButton/TagRF**, the **iButton/TagRF** type, the description adopted by the user, the Length of Stay, the internal reference and the unit corresponding to the respective **iButton/TagRF** recorded are listed.

A description and the meaning of the group 'Guardus Identification' and 'Filters', and the way in which they affect the report, can be found in the item Monthly Report.

The Rounds Report also offers some filter options specific to its functionality as shown below:

The records in this report can be filtered through the lists:

- **List only the checkpoints -** here you can select which checkpoints must be listed. These being:
  - With the filter option 'Guards' activated and the option 'Events' deactivated, only the checkpoints which were read by the guards identified will be listed. The checkpoints read by another guard identified will be listed regardless of the occurrence, or not, of events.
  - With the 'Guards' and 'Events' options activated, only the checkpoints at which events occurred and which were read by the guards identified will be listed.

- **Specific records -** here you can select which **iButtons/TagRF** of each type will be listed. On finishing the selection activate the check box 'Specific Records' in order to effect the filtering. The reports will then show only the guards, checkpoints and events selected.

Tip:

Try to select the guards, checkpoints and events which will be listed with the 'Specific Records' box deactivated. This prevents, on selecting each item from the list, that the report is recalculated. Only activate the 'Specific Records' box after all records to be listed have been selected.

The 'All' and 'None' buttons on the 'Rapid selection' item, accelerate the tasks which require that all of the records are activated or deactivated.

The report also offers the possibility to choose how the information on the guard's departure from the checkpoint will be viewed. Through the option 'List' it is possible to select whether the report will show the Length of Stay (given in minutes) or whether it will show the date and time when the guard left the checkpoint.

At the end of the report a relation between the time (in minutes) for which the guard remained at each checkpoint and the total time that he remained at all of the points is shown.

To print or export this report, consult the items *Printing reports* or *Exporting Reports* in this manual.

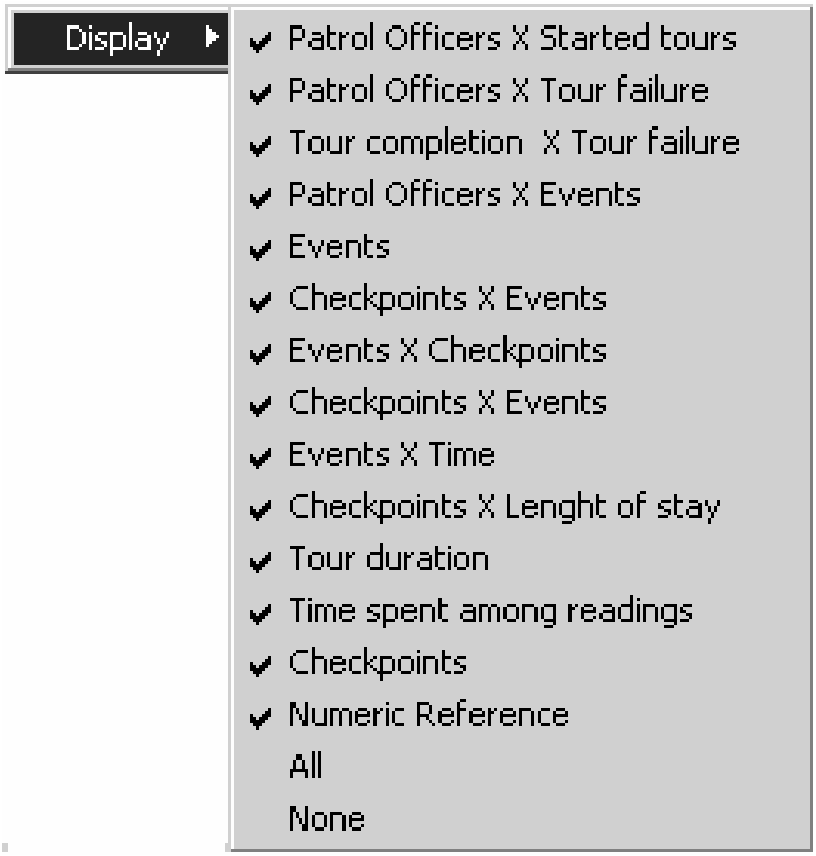
Statistics Report

Statistics report allows the visualization, through graphics, of the activities performed during the tours. By viewing this report, customers can compare tours performed by patrol officers in relation to their failures, their events, the tours scheduled, etc.

Viewing and hiding graphics:

In order to view or hide a graphic, click with the right button of the mouse on the area where graphics are displayed. An icon "Display" will show up followed by a menu where it's possible to select each graphic.

It's also possible to choose the option "All" to select all graphics and "None" to hide all of them:



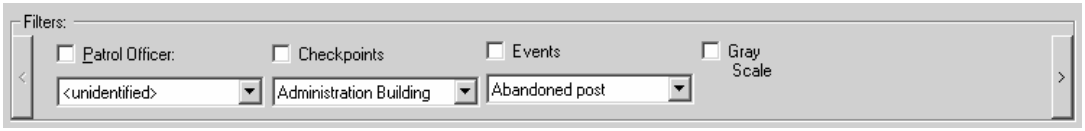
The statistics screen shows the following information:

The description and meaning of the groups 'Guardus Identification' and 'Filter'. The way they affect the report can be consulted on the item Monthly Report.

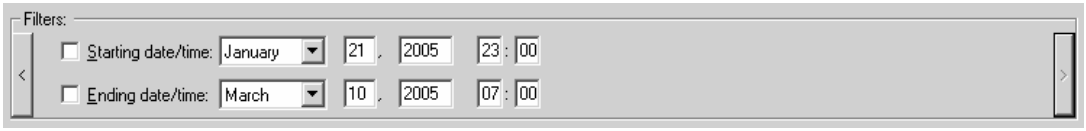
Just like in other reports, data can be filtered in order to display only the needed information. The following filters must be enabled:

- Patrol officer
- Checkpoints
- Events

Please select one of the options bellow:



The space where filters are displayed can be enlarged by clicking on the arrow on the right:



This way, other filtering options are displayed:

- Starting date/time
- Ending date/time

Tip:

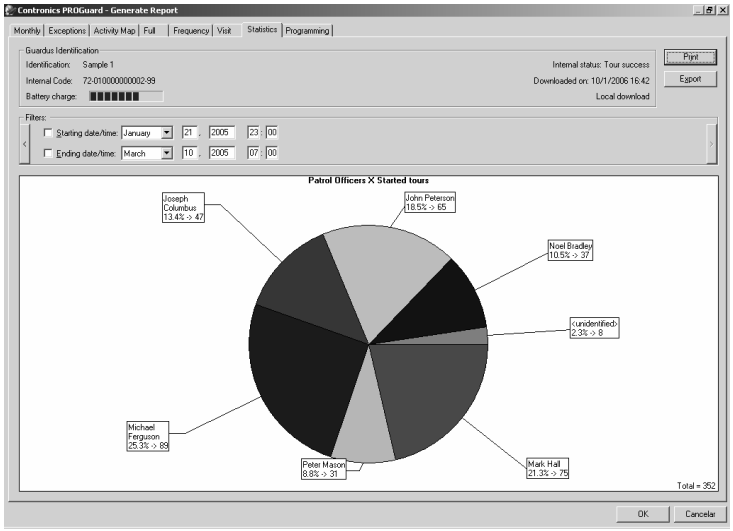
The fastest way to activate filters is by clicking on a patrol officer, checkpoint or event in any of the displayed graphics.

The gray scale option, next to the filters, adjust colors so graphics can be printed in black and white.

The following graphics are available:

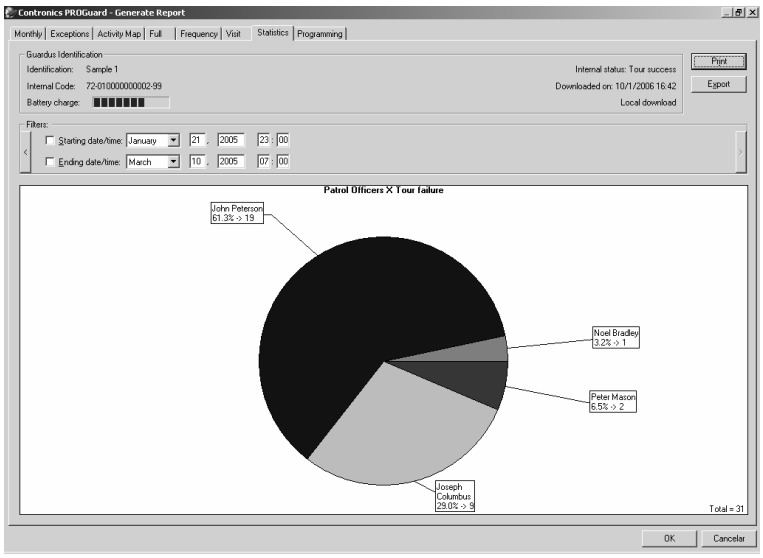
Patrol officer X Started tours:

It's a graphic representing the number of started tours by each patrol officer. When clicking on the graphic, the patrol officer selected will activate the filter 'Patrol officer'. In order to disable the filter, please disable the Patrol officer checkbox.



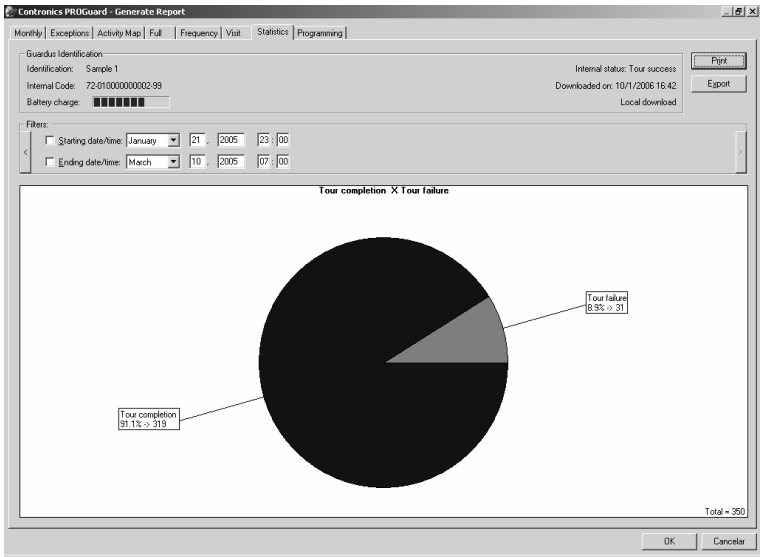
Patrol officers X Tour failure:

This graphic represents the number of tours not performed or not completed by each patrol officer. It can also be used to activate the 'Patrol officer' filter. It's possible to see which patrol officer has more failures compared to the others.



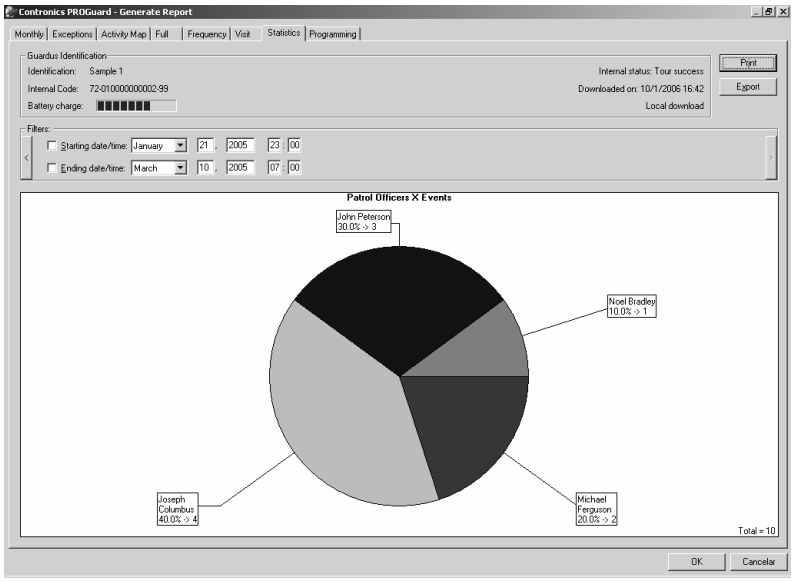
Tour completion X Tour failure:

This graphic represents the total of started tours (right corner at the bottom) separating the successful tours (Blue) and failed tours in (Green). If a patrol officer is selected the 'patrol officer' filter is enabled. The graphic permits to easily evaluate the performance of each patrol officer.



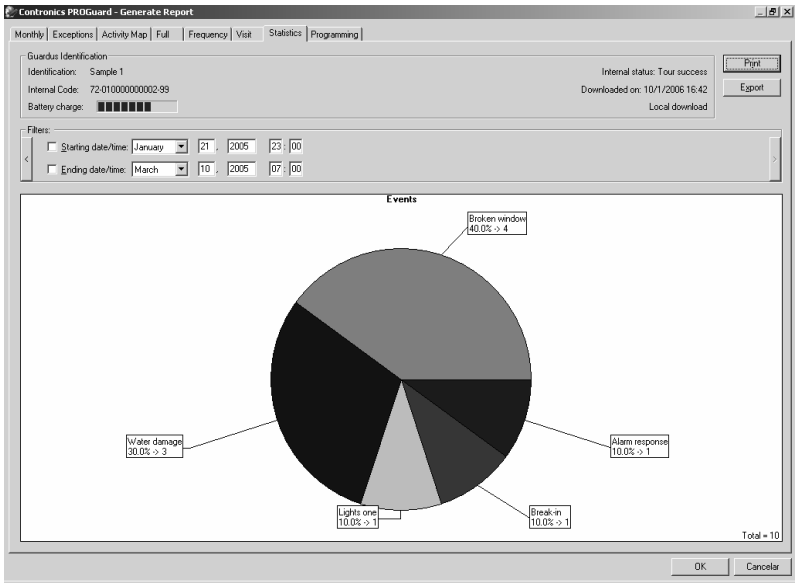
Patrol officer X Events:

This graphic shows the number of events registered by each patrol officer. It's possible to observe which shift of a patrol officer has more events. It can be used to activate the 'patrol officer' filter.



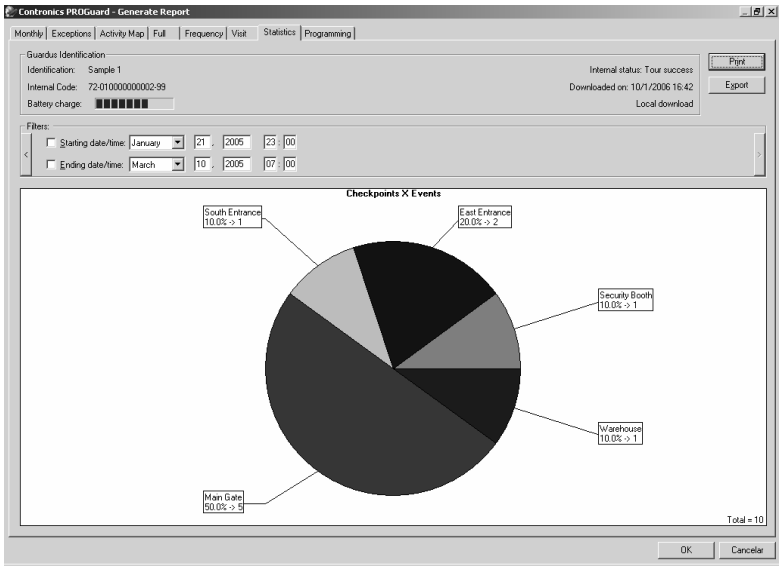
Events:

It represents the number of events that occurred, making easier the identification of which event happens the most. Clicking on the graphic, the 'event' filter is activated.



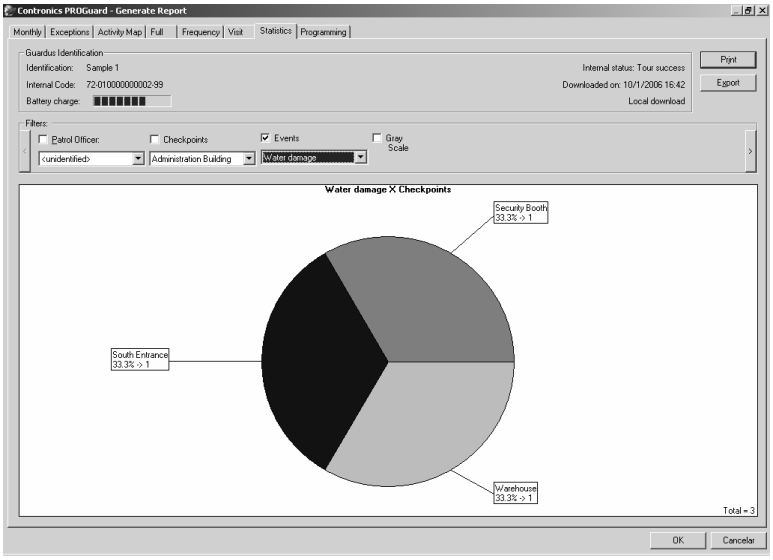
Checkpoints X Events:

It represents the quantity of events that occurred in each checkpoint, making easy to identify which checkpoint events happened the most. When clicking on the graphic, the checkpoint filter will be activated.



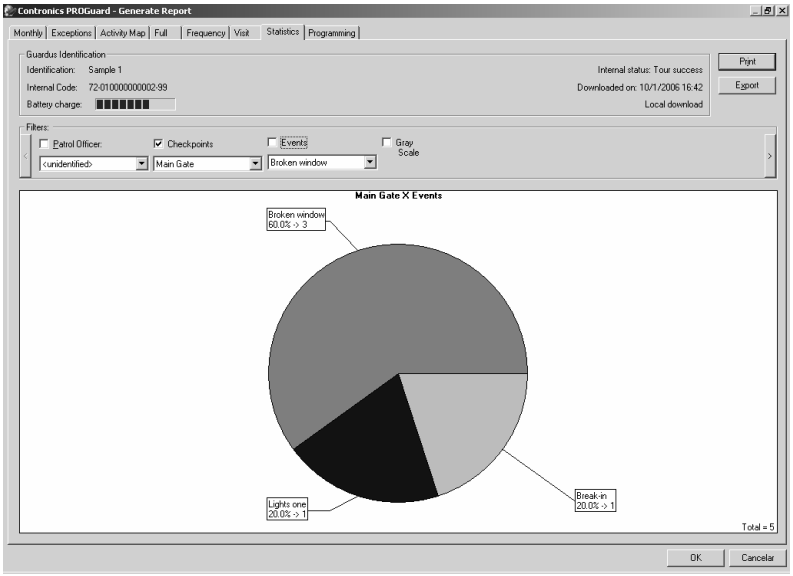
Specific event X Checkpoints:

This graphic shows the number of events that occurred in each checkpoint or in which checkpoint an specific event occurs the most. By clicking on a specific event the 'event filter' is enabled. If no event is selected, the graphic will look the same as the 'Checkpoints X Events' graphic.



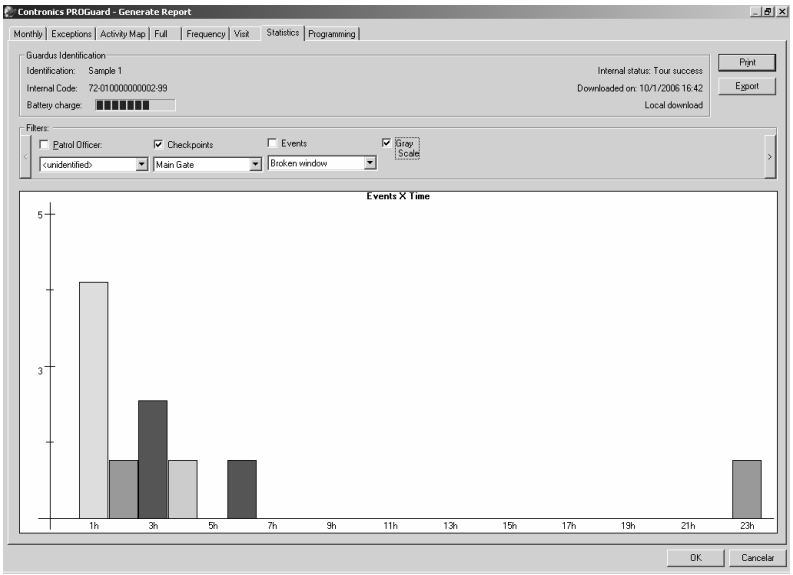
Specific checkpoints X Events:

Initially this graphic is the same as Checkpoints X Events and presents the quantities of events occurred in each checkpoint. When activating the 'checkpoint' filter it presents which events and how many times they were registered on that specific checkpoint.



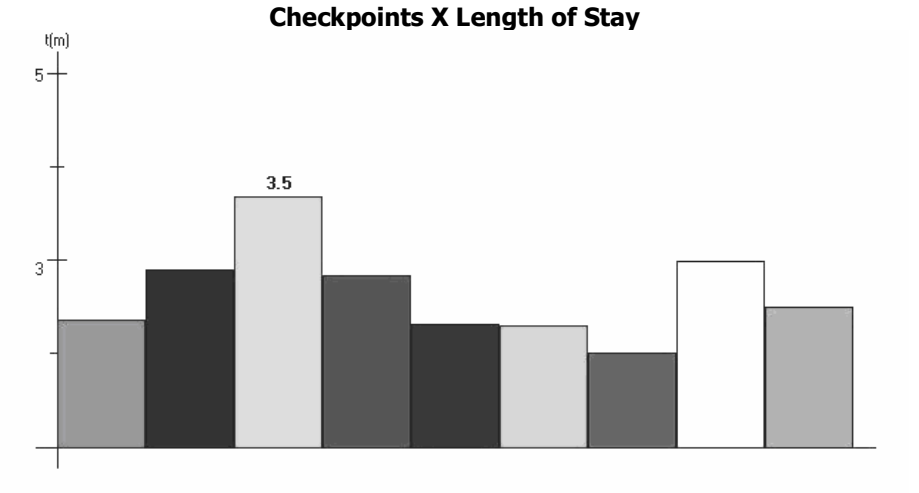
Events X Time:

This graphic shows the number of events that occurred during the day. It makes it easier to determine the time that most of the events occur. Clicking on the graphic the exact amount of events that occurred on that specific time will be displayed.



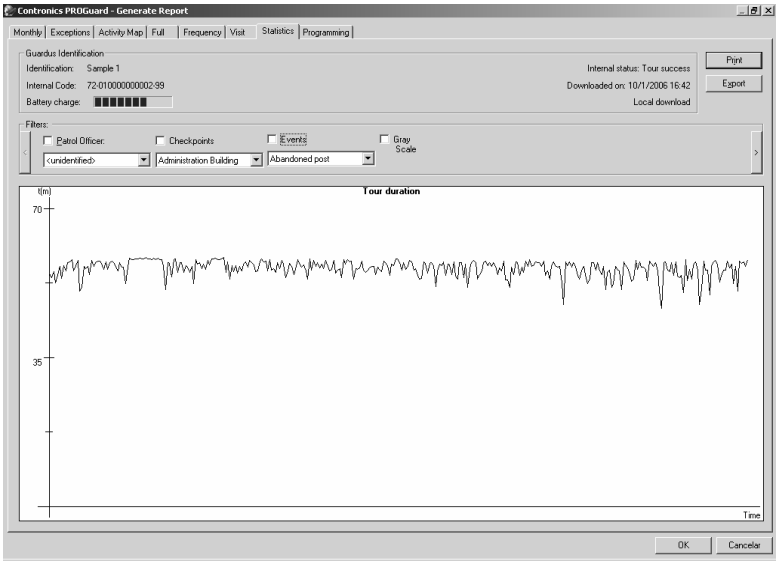
Checkpoints X Length of stay:

This graphic shows how long the patrol officer stayed in each checkpoint (as long as the button is read when arriving and leaving the checkpoint) on each tour. By clicking on a graphic column the name of the checkpoint and the length of stay will be displayed. In order to select another tour, click on the graphic "Tour duration". The title of the graphic will change informing if the new tour selected was successful or not.



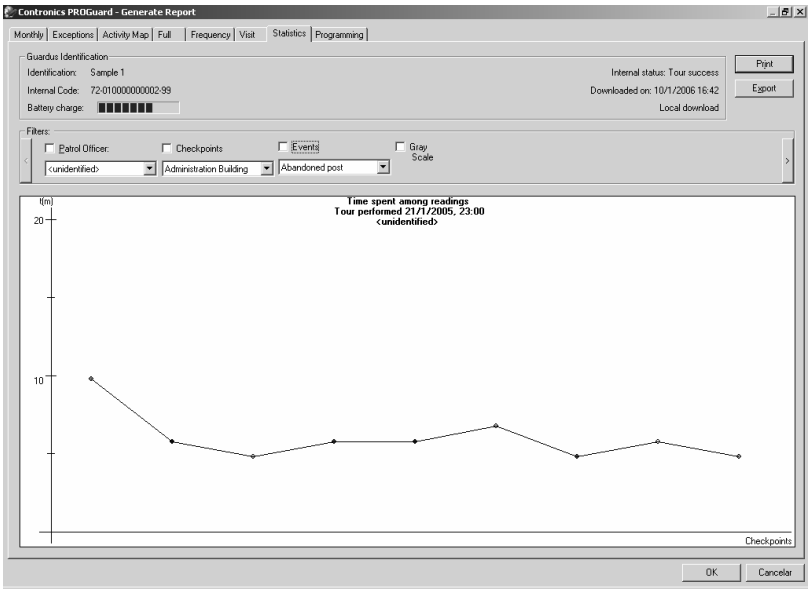
Tour duration:

This graphic shows how long each tour lasted. If the 'patrol officer' filter is activated, it will only show tours performed by a specific patrol officer. By clicking on the graphic a tour will be selected and it's duration will be displayed, as well as the date and time at the bottom. It's possible to analyze if the time spent to perform the tours was too long or not.



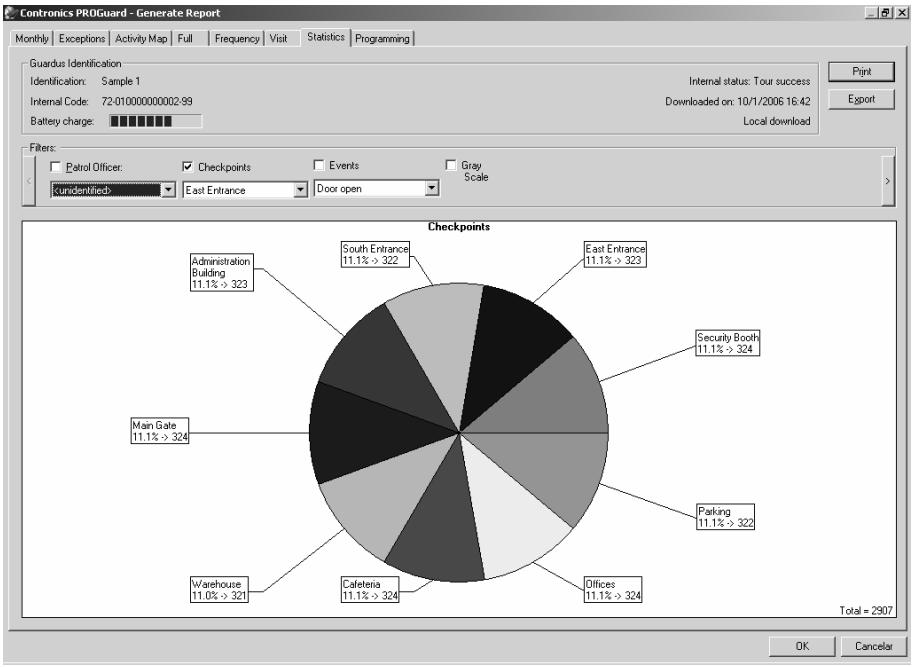
Time spent among readings:

By clicking on the graphic time spent among readings, the name of a checkpoint will be displayed, as well as how long the patrol officer took to arrive there from the previous checkpoint, in one specific tour. As for the first checkpoint, the time that the tour started will be taken into consideration to calculate how long the patrol officer took to arrive. In order to select another tour, please click on the graphic "tour duration". The graphic title changes to inform which patrol officer performed the tour and if it was successful or not.



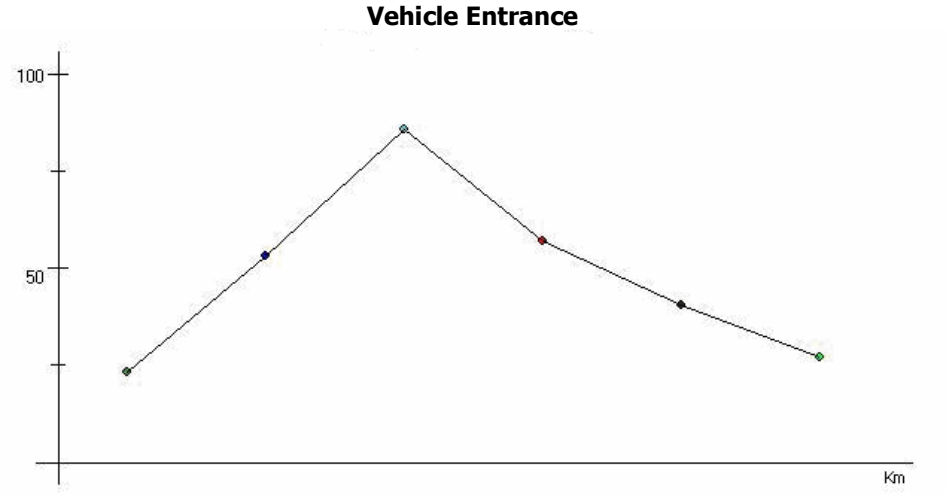
Checkpoints:

This graphic presents how many times a specific checkpoint was read. If the 'patrol officer' filter is enabled, it will show only checkpoints read by that specific patrol officer.



Numeric reference:

When an event has a numeric reference, we can see the evolution of that through this graphic. A specific event on the 'event' filter must be enabled in order to display the information.



Important:

Just like exemption, full and frequency reports, statistics report can be seen on the option Consolidate Downloads.

Programming Report

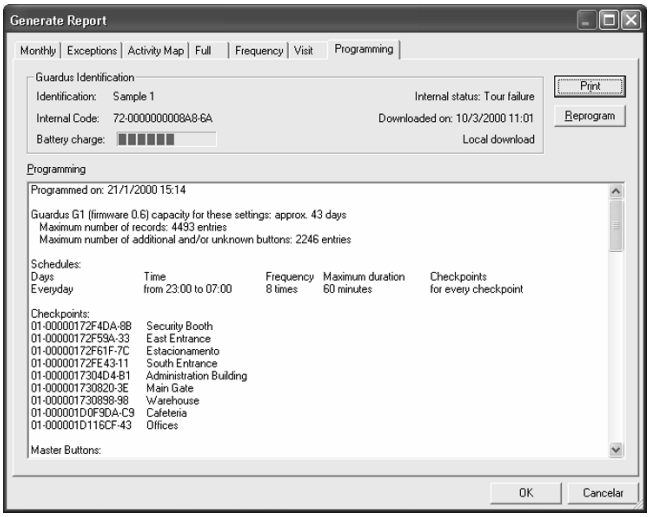
This report indicates the way in which Guardus is programmed to control rounds. In it, the following information is listed:

- Round schedules, with all of their characteristics;
- The checkpoint **iButtons/TagRF**;
- The master **iButtons/TagRF**;
- The guard **iButtons/TagRF**;
- The other employees **iButton/TagRFs**;
- The **iButtons** which comprise the numerical events keypad (numerical **iButtons**);
- The events which will be interpreted automatically;
- The holidays considered by Guardus;
- Other configurations, such as the type of signal to be emitted at the beginning of a round.

The Programming Report does not offer any type of filter, however, there is in its window, a 'Reprogramming' button which allows the equipment programming to be changed. This button is right below the 'Print' button.

To print this report consult the item *'Printing reports'* in this manual. The Programming Report cannot be exported.

The Programming Report is shown below:



A description of the group 'Guardus Identification' can be found in the item Monthly Report in this manual.

The Programming Report comprises the following information:

- **Programmed on -** date and time on which Guardus was programmed and, if available, the PROGuard version used to carry out the programming.
- **Guardus Capacity for this program -** estimate of the number of days Guardus is capable of working without over-writing previous records. The number of days will depend exclusively on the way Guardus is programmed, that is, if there is a great intensity of rounds, Guardus will be able to store less days, and vice-versa.

  Each model and version of Guardus has a certain quantity of memory for data storage. For example, Guardus G3 has 32 Kbytes of memory, which allows it to store approximately 4000 **iButtons** readings.

- **Round schedules -** are listed in groups or intervals, each group occupying a different line. The round schedules are often grouped into situations of the type '5 times', indicating that in this schedule more than one round must occur (in this case, 5 rounds). Each line of the schedule will be composed of the identification of the days (Everyday, from Monday to Friday, Saturday and Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday or Sunday), schedules (at hh:mm, or at hh:mm to hh:mm if it is an interval of more than one round), the round frequency, if it is an interval of more than one round (n times), the duration of each round (in minutes) and the checkpoints (those which must form part of the round).
- **Checkpoint iButtons/TagRF -** lists the description attributed to each checkpoint, along with the unique serial number of the **iButton/TagRF** associated with it. In the initial programming the checkpoint are identified by the text 'Checkpoints' followed by a sequential number.
- **Master iButtons/TagRF -** lists the description attributed to each master **iButton/TagRF**, along with its unique serial number. In the initial programming the master **iButtons/TagRF** are identified by the text 'Master **iButton/TagRF'** followed by a sequential number.
- **Guard iButtons/TagRF -** lists the name attributed to each guard, along with the unique serial number of the **iButton/TagRF** associated with it. In the initial programming there are no pre-recorded guard **iButtons/TagRF**.
- **Employees iButtons/TagRF -** lists the name attributed to each member of employees, along with the unique serial number of the **iButton/TagRF** associated with it. In the initial programming there are no pre-recorded employees **iButtons/TagRF**.

- **Numerical iButtons -** lists the unique series number of the **iButton** associated with the numerical events keypad. These **iButtons** listed may be inserted into a keypad similar to the numerical events keypad, substituting the latter. In the initial programming there are no numerical **iButtons**.
- **Events -** lists the code and the description of recorded events.
- **Holidays -** lists the holidays recognized by Guardus. On these days Guardus uses the schedules defined for Sundays. Consult the Programming Report, provided with your Guardus, to find out the holidays initially programmed in your equipment.
- **Advanced options -** indicates the general Guardus operating parameters. These advanced configurations alter only the way in which Guardus interacts with the user, without changing any characteristics as far as round control is concerned. The advanced options are as follows:
  - Round start (without signaling, with sound signaling, with light signaling, or both);
  - Round completed (without signaling, with sound signaling, with light signaling, or both);
  - Interval between start signals (time in minutes that Guardus will warn again that it is time to start the round. This must not be considered should 'Without signaling' be selected for the round start signal);
  - Signal the round status after contact with guard **iButtons/TagRF** (yes or no);
  - Accept additional and/or non-registered **iButtons/TagRF** (yes or no);
  - Password protection (yes or no, indicating whether a password is need to reprogram Guardus);
  - Allow checkpoints to be revisited within one round (yes or no);

- Require Guard identification at the beginning of each round (yes or no);
- Accept checkpoints outside the scheduled time (yes or no).

More details of these options can be found in the item *Changing Guardus programming* in this manual.

- **Remote-i -** lists the dial-up information for the CommCenter.
  - Type of equipment;
  - Maximum speed;
  - Area code;
  - Telephone number;
  - Country code;
  - User area code and dial-up properties;
  - Number of attempts;
  - Interval between attempts;
  - Dial-up command.

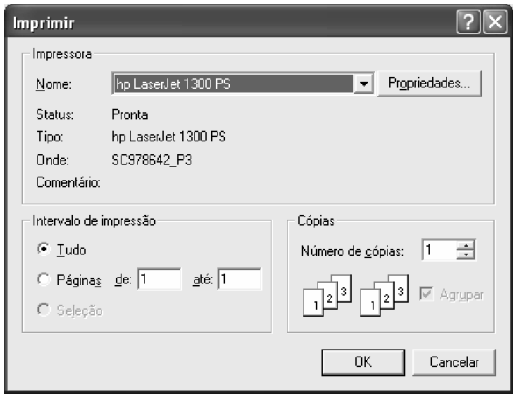
Remote-i ISP - Lists the dial-up information for the Internet access provider.

- Area code;
- Telephone number;
- Country code;
- User area code and dial-up properties;
- Number of attempts;
- Interval between attempts;
- Dial-up command;

- User;
- Password;
- Authentication;
- IP of destination;
- Port.

Printing Reports

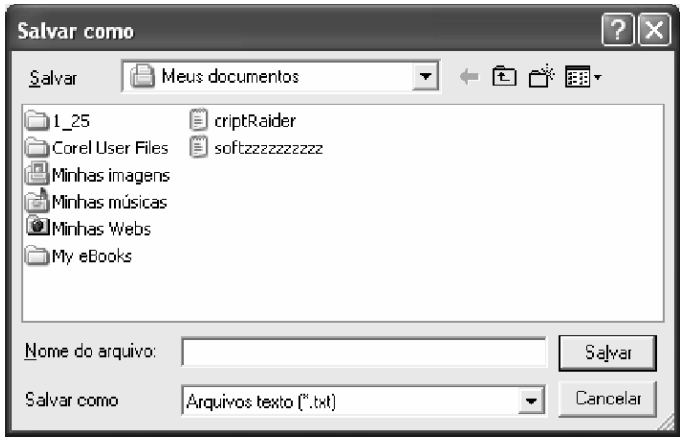
All of the PROGuard reports have a 'Print' button in the top right corner, which allows the generation of different printed report versions. On clicking this button, PROGuard will show the standard Windows print window, as shown to the right.



Through this window you can select the number of copies of the report you want to print, as well as select, through the 'Configure' button, the printer to be used, if your system has more than one installed. While printing is in progress, PROGuard will display a window showing the page number which is being processed for printing.

Exporting Reports

The 'Monthly', 'Exceptions', 'Activity Map', 'Full' and 'Frequency' reports have an 'Export' button in the top right corner which allows the saving of files as text files (*.txt). On clicking on this button, PROGuard will display the standard Windows 'save as' window, as shown to the right.



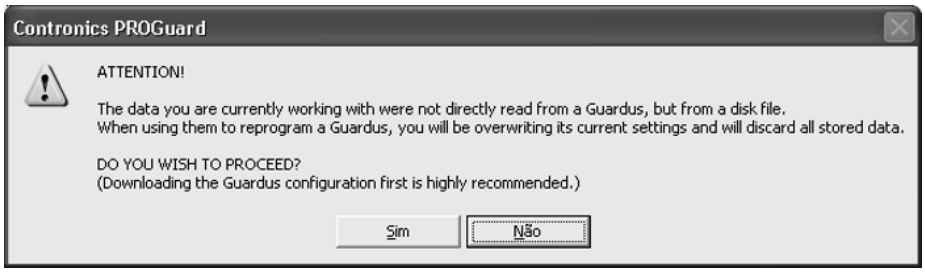
Through this window you can rename the file and select the unit and folder where it will be saved.

Modifying Guardus Programming

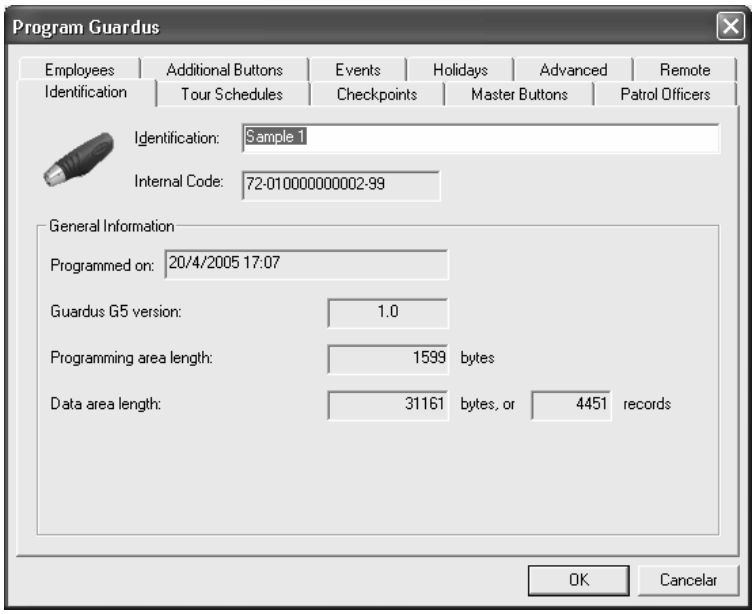
Guardus leaves the factory with an initial program already configured. If this program is not ideal for the application of your equipment, however, it can be altered through PROGuard, which also allows the modification of programming already carried out.

To change the programming the Guardus reading is necessary (through the option 'Read Guardus' in the initial window), or open a previously downloaded program through the following options: 'Viewing latest download', 'Viewing data of previous downloads' or 'Viewing data of external backup'.

Next, in the reports window, you need to access the program report clicking on its guide, and then select the option 'Reprogramming'. If the reprogramming is not being carried out directly through a recently carried out download, the following warning message will appear:



If Guardus is programmed with a password protection, it is necessary to give the password. A window with several guides will then be displayed: 'Identification', 'Schedules', 'Checkpoints', `Master **iButtons/TagRF',** 'Patrol Officers**',** 'Employees', 'Additional **iButtons/ TagRF**', 'numerical **iButtons**', 'Events', 'Holidays', 'Advanced' and 'Remote-i' as shown in the following window:

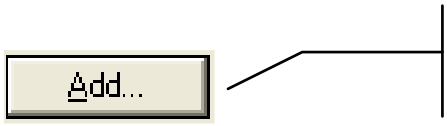


Attention!

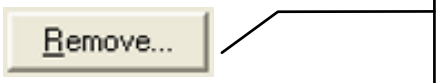
When the program is altered by PROGuard and transferred to Guardus the data, stored previously, will automatically be discarded and cannot be retrieved. Therefore, always download Guardus before reprogramming it.

Maintenance of Programmed Data

The way to interact with PROGuard is the same in all programming windows. In these windows there is a list of programmed items (such as schedules, checkpoints, etc).



Allows the inclusion of new items to the list.



Allows the removal of items already included on the list (activated only when an item on the list is selected).

Allows the modification of items already included on the list (enabled only when an item on the list is selected).

Note:

Observe that in the programming windows, where there are these buttons, the window displayed on clicking on the 'Add' button is the same as the 'Edit' button. The only difference is that the add window appears 'blank' or filled in with default values, and the edit one is filled in according to the previously selected data.

During the process of excluding information already included on the lists, a message requesting confirmation of the deletion will always be displayed.

Tip:

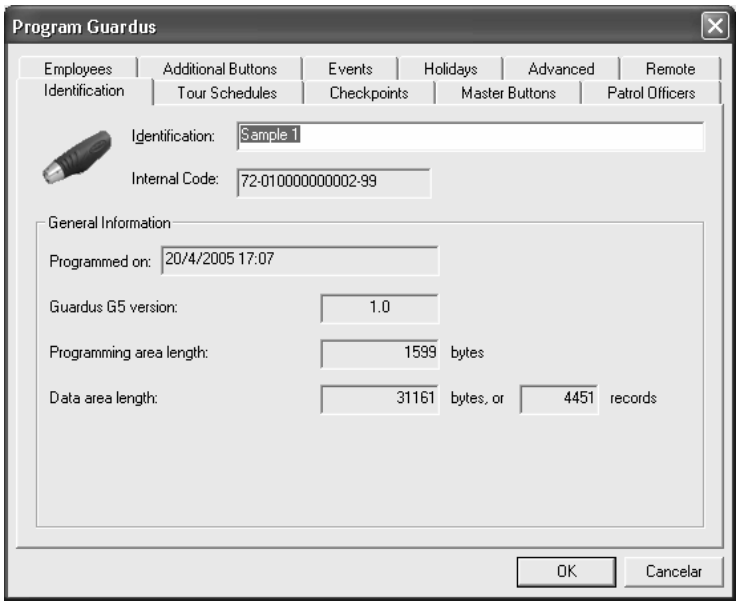
If you encounter difficulties in altering a registered item, remember that an old item can also be deleted and a new one registered.

It is possible to delete more than one item at a time. To select multiply items, drag the mouse from the top to the bottom over them, keeping down the left mouse button or click on the 'Ctrl' key after selecting the items with the left mouse button. When all the items have been selected click on the delete button.

Defining Guardus Identification

The first programming window guide ('Identification') is for the identification of the Guardus in use. This identification is shown in the reports and used to select the Guardus whose data you wish to view.

The window which shows the Guardus identification also displays other information as follows:



- **Identification -** is a field for the filling in of a description to be associated with the Guardus which is being programmed.
- **Internal code -** shows the unique serial number associated with the Guardus whose programming is being altered.
- **Programmed on -** indicates the last time the equipment was programmed (date and time).
- **Version of equipment -** indicates the hardware and firmware version of the equipment whose programming is being altered. This version determines the characteristics supported by the device in question.

Note:

PROGuard 2.1 or superior was developed specially for Guardus G5 and for version 3.0 or superior of Guardus G3. If you own a previous version of Guardus G3 (0.6, 0.5, etc.), some characteristics described in this manual may not be available or some screens can present different characteristics. However all the original functionalities of the equipment continue to be supported by PROguard 2.1 or higher, with the exception of Guardus G1 (firmware lower than 0.6), that is not supported as of PROGuard version 3.2.

- **Program Area Size -** indicates the area, in bytes, occupied by the information used in the programming of this equipment. The programming information consists of round schedules, checkpoints and other items registered in the Guardus programming window. The value for the program area size is automatically recalculated as the programming is altered.
- **Data Area Size -** indicates the size, in bytes, and in number of records, of the data area for the current program. The

size of this area, added to the program area, gives the total size of the Guardus memory.

Registering

Registering iButtons/TagRF

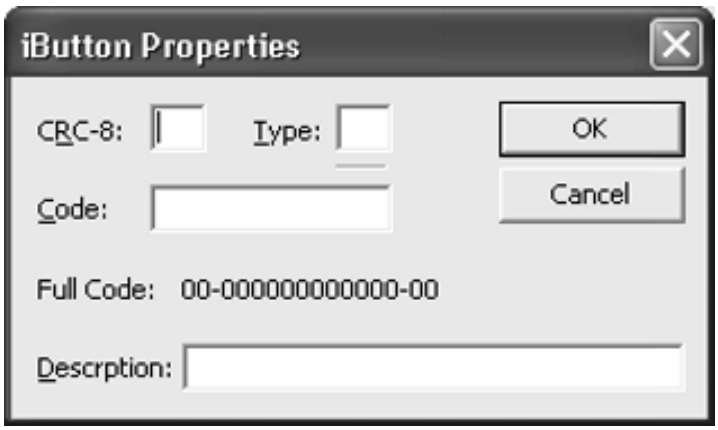
Each **iButton/TagRF** has an internal electronic serial number, which is unique and identifies it and will, from now on, be referred to only as the **number**.

Registering an **iButton/TagRF** consists of associating its use with its number. The possible uses of an **iButton/TagRF** are: checkpoints, master **iButton/TagRF**, patrol officer and employees.

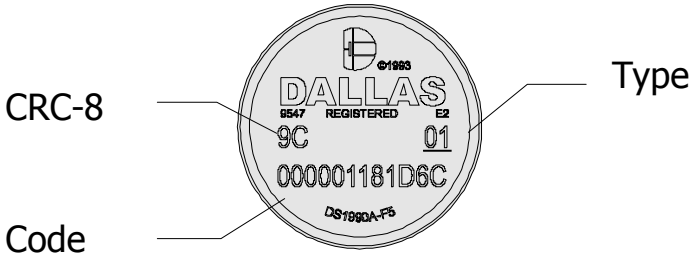
During the **iButton/TagRF** registration process you need to give its number and a description of its use.

Unlike a **TagRF,** an **iButton** number is printed on its front face.

The PROGuard window which requests an **iButton/TagRF** number has the same layout as the number which is printed on the face of an **iButton.**



In this window, the 'CRC-8', 'Type' and 'Code' fields refer to the data printed on the upper face of the **iButton,** using the same layout (CRC-8 or verification: above, to the left; type: above to the right; and code or serial number: below, centered). See in the figure below the location of each field:

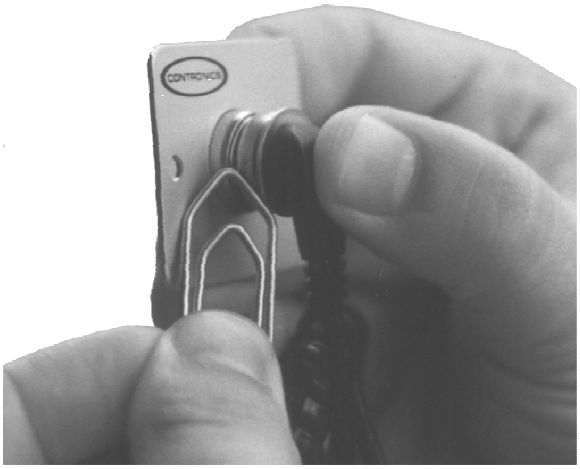


The fields of the above window may be filled in automatically, simply be making contact between the **iButton** and the interface. If you are registering a **TagRF**, simply bring it close to the **TagRF** reader of the interface (make sure that the interface which is being used supports **TagRF**).

When using a Serial Communication Cable to register an **iButton**, we suggest the following steps: (see the figure below).

1. Open the PROGuard window described above.
2. Touch the front face of the **iButton** with the front face of the Serial Communication Cable.
3. Use some metal object, such as a paper clip or a small screw driver, to make contact between the edge of the **iButton** and the edge of the Series Communication Cable reader head.
4. Hold firmly in this position until the **iButton** data appear automatically in the PROGuard window. When this happens, release the contact and click on the OK button.

This procedure can be applied in any situation where you wish to give **iButton** data, be it the checkpoint, master **iButton**, patrol officer, etc.



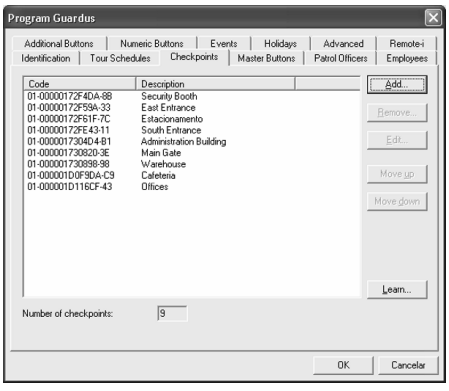
Using a metallic object, place it in a way so that it makes contact between the border of the iButton and the border of the extremity of the Serial Cable.

If you are registering RFTags just approximate them to the **RFTag reader**, located on our Download-iRF unit (optional). If you don't use or have this interface you can register the **RFTags through the Learn mode** (details available in 'Learn Button').

Registering Checkpoints

Through PROGuard it is possible to include or redefine checkpoints **iButtons/TagRF**, to register new or also delete existing **iButtons/TagRF**.

The checkpoint **iButtons/TagRF** programming window, accessible through the 'Checkpoint' guide of the Guardus programming window, has a list of registered **iButtons/TagRF** associated with a description for each of them as shown in the following figure:



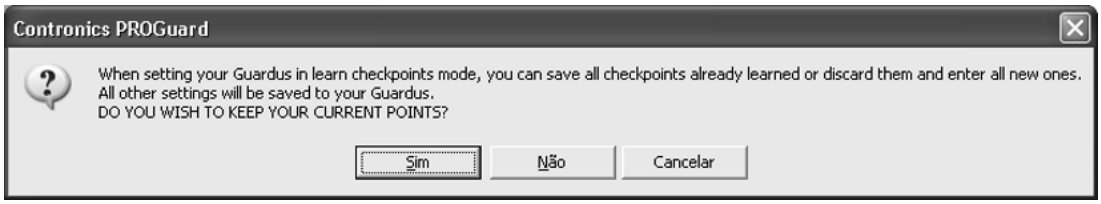
On altering an existing **iButtons/TagRF** it is possible to change its description.

To delete a checkpoint, simply select it with the mouse and then click on 'Delete'.

'Learn' Button

When clicked, the button 'learn' enables the Guardus itself to enter into a learning mode, redefining the current checkpoints or including new checkpoints. This procedure allows that all of the programming information, configured in whichever window up to that moment, be recorded, enabling also that all of the previously registered checkpoints be, or not, discarded.

For this operation to proceed the data conformation is necessary as shown in the following window:



If the button 'Yes' is clicked on, new checkpoints can be included, preserving the current ones. If the 'No' button is clicked on, all existing points will be discarded thus promoting a full reregistering of checkpoints. It is also possible to cancel the operation by clicking on 'Cancel'.

The inclusion or reordering of new checkpoints can then be done by placing Guardus in contact with the communication interface. The sequence in which the readings are carried out must be the same as that in which the **iButtons** are registered**.**

The reading of a master **iButton/TagRF** can result in the Guardus returning to normal operation. Confirmation of the exit of the learning mode is given through the emission of the signal for rounds carried out. Guardus will be ready to operate normally, considering the new checkpoints configuration.

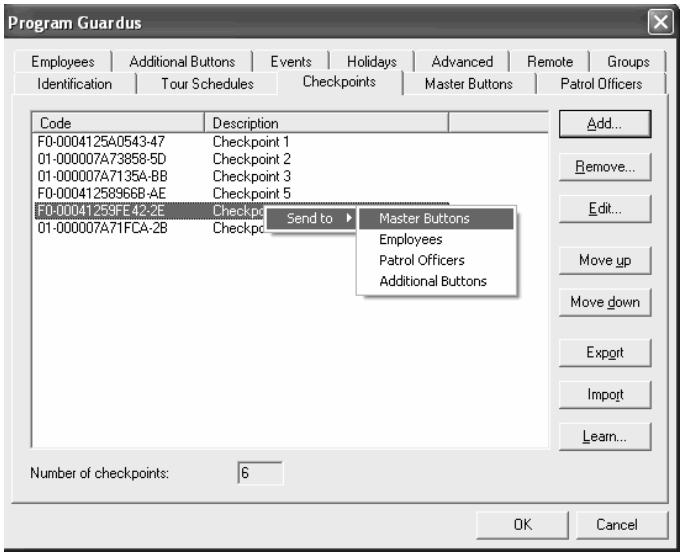
Note:

*The checkpoint **iButtons/TagRF** registered with the help of Guardus receive, automatically, as a description, texts of the type 'Checkpoint 1', 'Checkpoint 2', etc. (according to the order in which they were given). While Guardus is activated to add or learn new checkpoints, any non-registered **iButtons/TagRF** will be accepted as a checkpoint.*

The 'Learn' button will not be available in the programming windows of other types of **iButtons/TagRF** (master, patrol officer and employees) since this Guardus option refers exclusively to the checkpoint **iButtons/TagRF**.

To register a **RFTag as master button**, patrol officer, employee or additional button, follow the instructions below:

1. Register the RFTag as a checkpoint, using the appropriate interface or the Learn Mode.
2. Right click on the checkpoint chosen:



3. Choose where you would like to transfer the RFTag to.
4. Verify if the transfer was performed successfully.

Registering Master iButtons/TagRF

PROGuard allows one or more master **iButtons/TagRF** to be associated with a Guardus. Any **iButton/TagRF** can be configured as a master **iButton/TagRF**. Therefore, you must be very careful in attributing this function to it, since this allows a Guardus which has registered a failure in rounds to signal again rounds carried out (see the item *Check round result* in the Guardus manual).

The master **iButtons/TagRF** programming window can be accessed through the Guardus programming window in the 'Master **iButtons/TagRF**' guide. The registering process follows the same procedure given in the item *Registering checkpoint* ***iButtons/TagRF,*** in this manual.

Registering Patrol officers

The patrol officer **iButtons/TagRF** allow PROGuard to identify the patrol officer responsible for each round. After a patrol officer has been registered by Guardus through the reading of his **iButton/TagRF**, everything that occurs, until another patrol officer is registered (the rounds carried out or not, events, etc.), will be attributed to the first patrol officer.

Guardus leaves the factory without any patrol officer **iButtons/ TagRF** registered. Through the patrol officer **iButtons** programming window, accessed through the 'patrol officers' guide, it is possible to register these **iButtons/TagRF**. The procedure is analogous to any other **iButtons/TagRF** registration.

Consult the item ***iButtons/TagRF*** *Registration* for a description of this process.

Registering employees

Guardus can also register any other **iButtons/TagRF** which are not checkpoints, masters or patrol officers, as **employees iButtons/TagRF**, which are used to identify other employees who are not patrol officers. The information generated by the records of these **iButtons/TagRF** can be used, for example, to determine the frequency (a function of an automatic recording clock) of the employees member associated with them.

Unlike the patrol officer **iButtons/TagRF**, which indicate who is responsible for the controlled rounds, the **iButtons/TagRF** of other employees members are not related in any way to the rounds, these also being listed as control records (identified in the reports by the sequence '>>>').

To register **iButtons/TagRF** of the other employees members, you need to access the respective window through the 'Employees' guide in the Guardus programming window. Consult the item *Registering **iButtons/TagRF*** for a description of this process.

Registering Additional iButtons/TagRF

The additional **iButtons/TagRF** offer Guardus a great flexibility, since they allow that Guardus is capable of working with a practically unlimited number of **iButtons/TagRF**.

It is very important to understand that the additional **iButtons/TagRF** are not recorded in Guardus, but on the computer. Thus, when Guardus reads an additional **iButtons/TagRF** it cannot identify to which **iButtons/TagRF** it refers. This will be done only by PROGuard when the data are downloaded. If a certain additional **iButton/TagRF** is registered (programmed) on one computer and the Guardus is downloaded onto another computer, the latter computer will not know the description for that **iButton/TagRF**, and the reports will show only non-identified **iButton/TagRF**. When Guardus is programmed with additional **iButtons/TagRF** it must be downloaded only onto the computer which programmed it.

The additional **iButtons/TagRF**, as well as the employees **iButtons/TagRF**, are not related to the rounds, these also being listed as control records (identified in the reports by the sequence '>>>').

Note:

*In order to allow the reading of the additional **iButtons/TagRF**, the option 'Accept additional and/or non-registered **iButtons/TagRF**' needs to be selected in the 'Advanced' programming guide. Besides permitting that the Guardus reads additional **iButtons/TagRF** this option also allows the non-registered **iButtons/TagRF** to be registered, which are listed as control records and identified as 'non-registered **iButtons/TagRF**'. Guardus leaves the factory with this option deselected.*

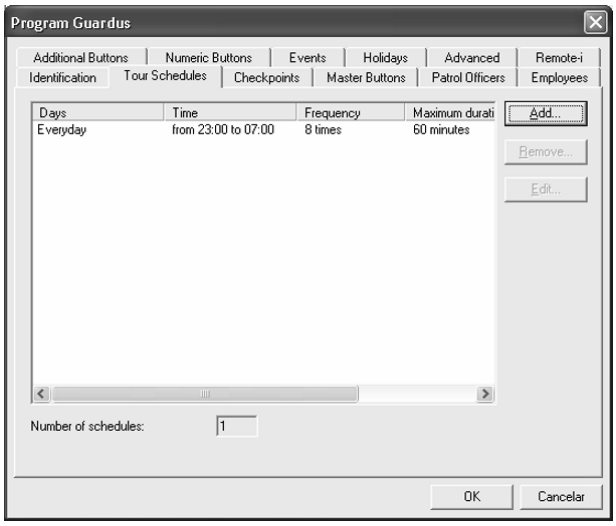
To register additional **iButtons/TagRF**, you must access the respective windows through the 'Additional **iButtons/TagRF**' guide of the Guardus programming window. The procedure is analogous to the registering of checkpoints.

For more details on the process of registering these **iButtons/TagRF** consult the item *Registering checkpoints **iButtons/TagRF*** in this manual.

Registering Round Schedules

In the programming window it is possible to view the currently registered schedules. Also, in this window there are buttons to 'Add', 'Delete', and 'Edit' these schedules.

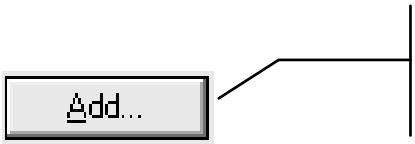
The figure below represents the Registering Round Schedules window, accessible through the 'Schedules' guide:



Guardus leaves the factory without any pre-programmed schedules. To add a new schedule, follow the procedure described below:

Example:

In this example we will create a round where the patrol officer will visit all the checkpoints 5 times, from Monday to Friday, between 08:00 and 13:00.

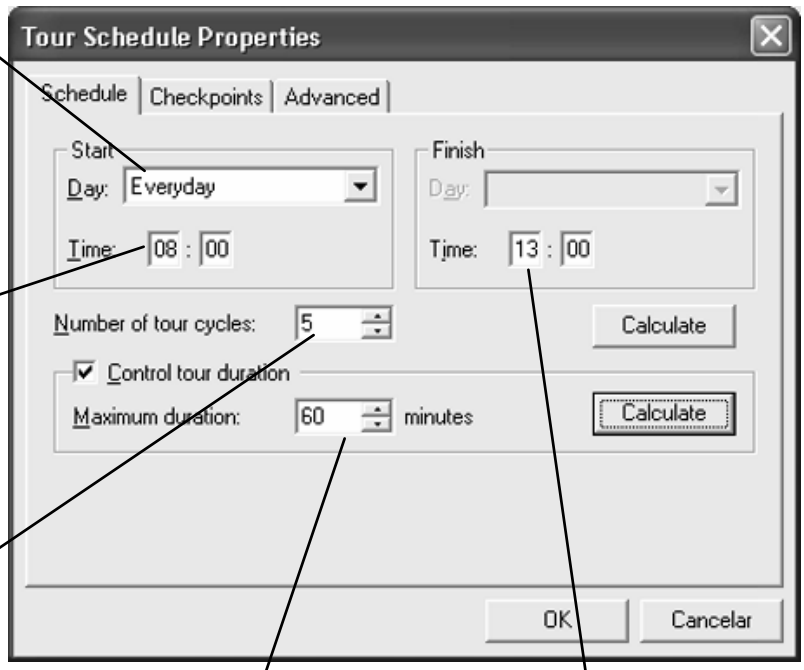


Click on the 'Add' button shown in the above window

Choose the option: 'From Monday to Friday'.

Choose here the Round Start Time.

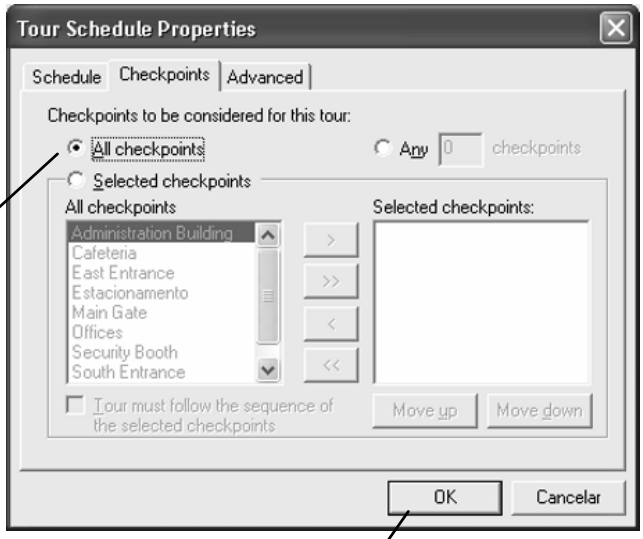
Define here how many times the round will be carried out during these times.



Choose here the length of the complete round. (*Optional).

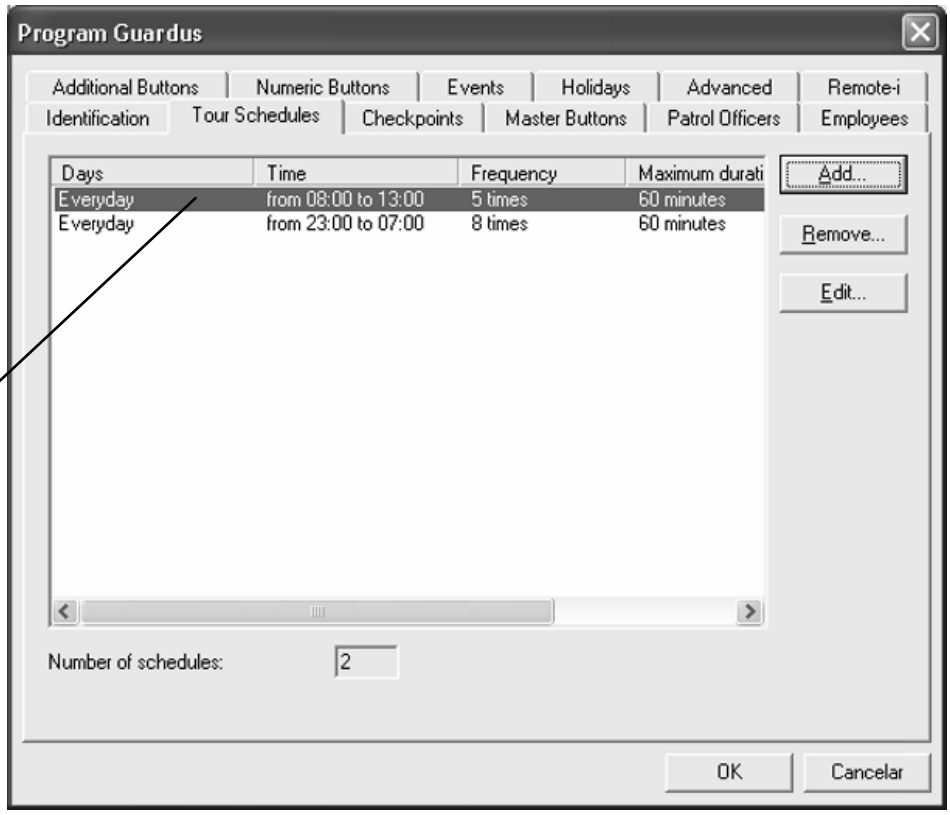
Choose here the time the round should end.

Open the guide 'Checkpoints' and select 'All checkpoints'.



Click 'OK'

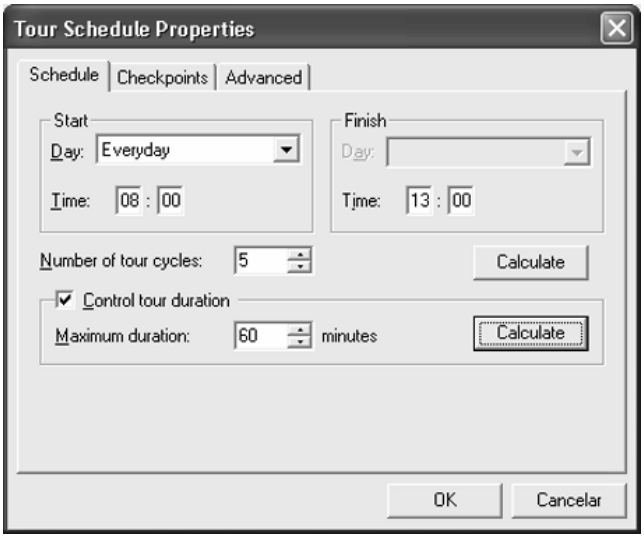
Note! Your round for Monday to Friday from 08:00 to 13:00 as been created.



To alter an existing schedule, the process is exactly the same, with the difference that the Round Schedule Configuration window will start with all the data already given for the selected schedule.

During the inclusion of a round schedule, a window will be shown with three guides available: 'Schedule', 'Checkpoints' and 'Advanced'.

'Schedule Guide'



Note that in the above window there are four groups of fields. In the group 'Start' you can specify the days of the week and the start time of each round interval.

In the group 'End' give the end time and day of each round interval. Note that there can be different programs for each day of the week, weekends and working days. The option to carry out the same program 'Every day' is possible. For this option, only the hours field of the 'End' group is available.

Attention!

The 'Day' field of the 'End' group will only be available when the 'Day' field of the 'Start' group is filled in with a certain day of the week. If you selected 'Every day', 'Monday to Friday' or 'Saturdays and Sundays', PROGuard will consider that the interval is shorter than a day, and if the end time is earlier that the start time, it is prolonged to the next day.

The following two groups, the field 'Number of Rounds' and the group 'Control Round Duration', operate together and only one of the values is given and PROGuard calculates the other. This procedure can be carried out by filling in one of the fields and then clicking on the calculate button of the other field. Note, however, that the group 'Control Round Duration' can all be selected or all be deselected by clicking on *control* to the left of the group title. In this case, the calculate buttons are deselected.

Let's suppose that the field 'Number of Rounds' is filled in with any value and then the calculate button of the group 'Control Round Duration' is clicked on. In this case, the value which will be given in the field 'Maximum Duration' will be the highest possible value, so that there will always be a round activity between the start day and time and the end day and time. The automatically calculated value can be manually decreased, but never increased. If the value is decreased then there will be periods of time between the start day and time and the end day and time in which there will not be a round activity.

It is possible to stipulate a maximum duration for the carrying out of each round cycle and after click on the calculate button of the 'Number of Rounds' group. In this case, the value which will be given in the 'Number of Rounds' field will be the highest possible number which serves the restrictions imposed by the other fields in this window.

If only one round is required or possible, the field 'Control Round Duration' will not be available.

Note:

If, for example, cycles starting every 60 minutes from 10:00 to 14:00 are specified, there will be cycles starting at 10:00, 11:00, 12:00 and 13:00, but NOT at 14:00, which simply marks the final time.

Attention!

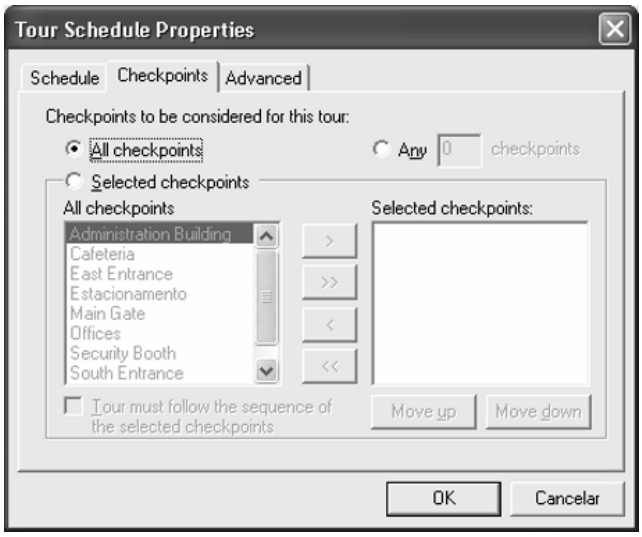
Guardus has a limited number of rounds which it can control. If a message stating that such a limit has been exceeded, try to increase the interval between the round start or, if rounds with a great frequency are really necessary, use without controlled duration.

'Checkpoint' Guide

In the 'Checkpoint' guide, you can select one of three options to determine specific checkpoint (only for points already registered). They are:

- **All control points –** indicates that all control points will form part of this round (standard value).
- **Any control points –** indicates that any number of control points, limited by the number of control points registered, will form part of the round.
- **Selected control points –** indicates specific control points to form part of a round. When this option is selected, a box is activated, enabling the selection of the desired control points from the 'All points' list. This selection can be made through buttons or with a double click of the mouse on the selected point. To force a reading of the checkpoints selected, following a specific sequence, simply select the 'Round carried out according to the sequence of control points selection' box and arrange them using the buttons 'Move up' and Move down'.

An example of the checkpoints window is given below:



Advanced options

In this guide the control over the different round schedules is found, which obliges the patrol officer to carry out each round always following a different course to that which was used in the previous round.

By moving the marker to the right, a number increases which is limited by the number of checkpoints which are available to make up a round, and which indicates how much one round will need to differ from another.

For example, if the patrol officer has visited the checkpoints A, B, C and D in this sequence, and the minimum number of different paths in relation to the previous round is 2, it can repeat only two points in the sequence.

Thus, the valid sequences for the next round will be:

A → B →D →C,

A → C → B → D,

B → A → C→ D,

D → C →B → A.

Another example: A round is programmed with 'Whichever 3 points', with checkpoints A, B, C, D and E, and, in the advanced guide,

'Demand a differentiated round' was selected, with 'Minimum number of differentiated rounds' = 2.

The patrol officer started the first round by visiting the control point A. From there he went to control point B, and then he visited control point C. We represent this route as:

A → B →C

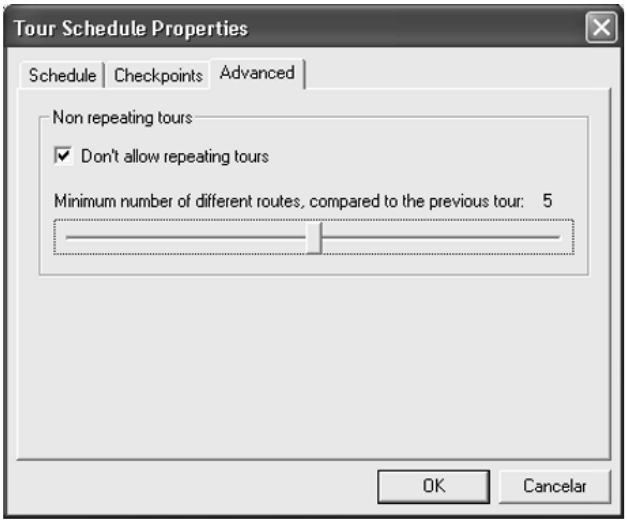
In this example, on the second round the patrol officer could carry out one of the following possible routes:

A → D → E

B → D → E

C → D→ E.

Below, you can see a example of the window displayed through the 'Advanced' guide:



Registering Events

An event is an unusual occurrence which is noticed by the patrol officer at a checkpoint or at a place inspected during his activities. A fence that has been cut, a window that has been forced and a door which should be locked but was open, are some typical examples of events. Events can also be additional information which needs to be

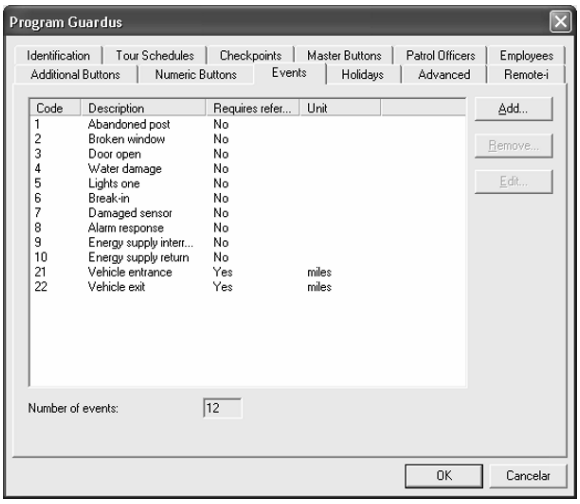
registered with respect to something controlled by the patrol officer. For example, the mileage shown on a vehicle's odometer.

The events registered are automatically interpreted when the Guardus data are downloaded in PROGuard.

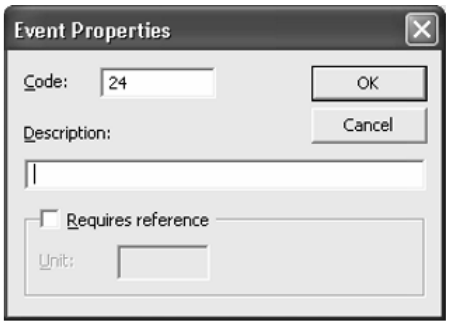
It is important to note that the patrol officer is not limited to reporting only events registered in Guardus, but only these will have descriptions given in the PROGuard reports. The other events will be listed through a given numeric code.

The events may have any numeric code associated with any description or even require a numerical quantity, which may have an associated measurement unit. In the previous example in which the numerical events keypad is used to control the vehicle mileage, the unit would be 'Km' and the numerical quantity would be the figure shown on the odometer.

The events programming window is as follows:



In order to add a new event click on 'add', the following window will appear:



Here, you must give the event code, its description and, if necessary, a reference with its associated unit of measurement. Click on 'OK' to end.

Events are used together with numerical events pad which consists of a pad onto which 12 numbered **iButtons** are attached.

Example: In PROGuard we created the event code 14, the description for which is 'Break-in attempt'. This event does not require a numeric reference. Let us suppose that the patrol officer has inspected the checkpoint 'North Wall' and there he noticed a break-in attempt. Soon after reading the **iButton/TagRF** placed on the North Wall, the patrol officer opens the numerical events keypad and reads the **iButtons** marked '1', '4' and 'ENTER'. When Guardus is downloaded in PROGuard, the reports will show that the patrol officer detected a break-in attempt at the North Wall and the date and time of this occurrence.

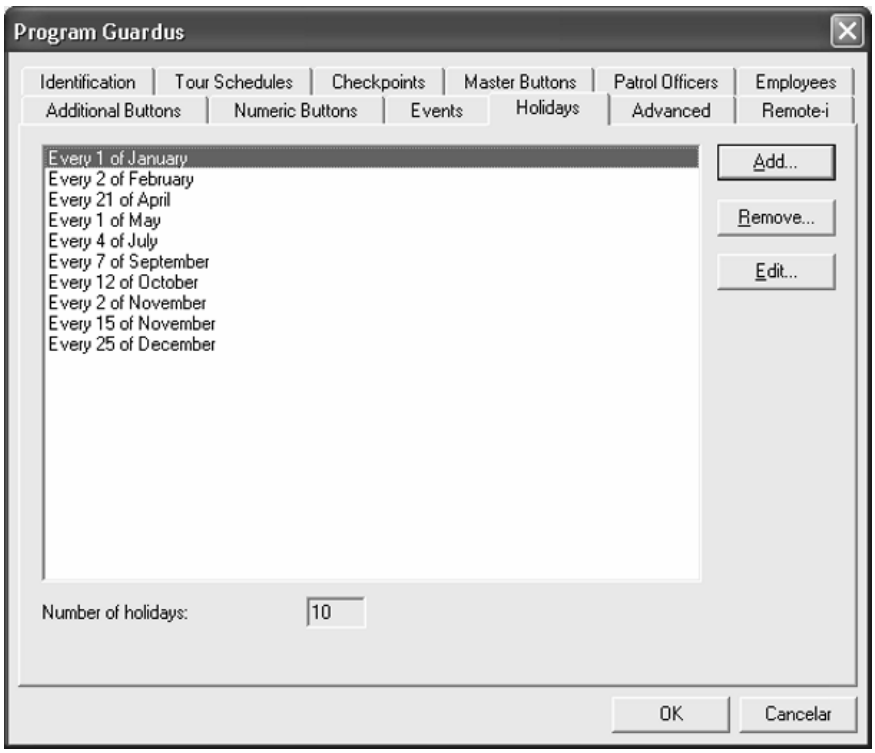
Registering Holidays

Since the Guardus round schedules allow a differentiation between various days of the week, it is also possible to identify some specific days which will be considered as holidays.

On these days, Guardus will control the rounds as if it were Sunday. This means that if a holiday programmed into Guardus occurs

on a Tuesday, instead of Guardus behaving as if it were a Tuesday, it will behave as if it were a Sunday.

The holiday programming window, accessible through the 'Holidays' guide in the Guardus programming window, has the following appearance:

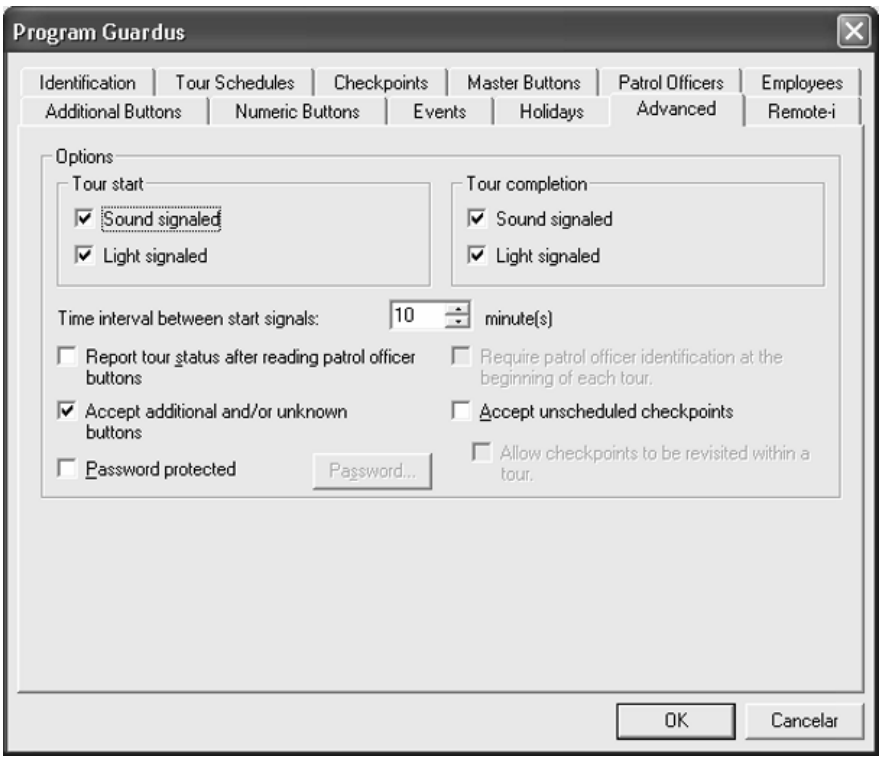


As shown in the window below, the 'Day' and 'Month' fields are used to specify the date of the holiday. In the 'Year' field it can be defined whether this holiday is valid only for that year or for every year.

Advanced Options

The advanced options allow, in some situations, the modification of the Guardus behavior. These options do not alter the way in which Guardus controls the round, but simply how it interacts with the user.

The advanced programming window, accessible through the 'Advanced' guide in the Guardus programming window, is a follows:



This window shows the following options:

- **Round start -** allows the selection of the type of signaling to be used by Guardus to indicate the beginning of a round schedule. Guardus can be configured to work without any signaling, with sound signaling, with light signaling, or with both. Light signaling is particularly advantageous in situations where you require that Guardus signals the start of a round schedule in a discrete manner. This form of

signaling requires greater attention from the patrol officer, guaranteeing him more discretion when desired.

- **Completed round -** allows the configuration of the type of signaling which Guardus uses when the patrol officer completes a round. This signaling is emitted by Guardus right after recording the last checkpoint. In the same way as for the round start, this option can be configured not to emit a signal or to use sound and/or light signaling.
- **Interval between start signals -** indicates the length of time in minutes between Guardus emitting the round start signal and the patrol officer beginning the round. This field will be deselected if you select the option 'Without signaling' before 'Round Start'.
- **Signaling round status after contact with patrol officer ibutton -** through this option it is possible to configure Guardus to signal the round status after making contact with a patrol officer **iButton/TagRF**. This allows a patrol officer to be informed of the status in which a Guardus was received on recording his **iButton/TagRF**. However, even on signaling round failures on reading the patrol officer **iButton/TagRF**, Guardus will not return to signaling rounds carried out without the use of a master **iButton/TagRF**.
- **Accepting additional and/or non registered iButtons/TagRF -** when switched on, this option allows Guardus to record any **iButton/TagRF** even if it is not registered. It also allows additional **iButtons/TagRF** to be recorded by Guardus. When this option is switched off, Guardus will not record additional **iButtons/TagRF** even if they have been registered on the equipment.
- **Protected by password -** this option determines the use, or not, of a password in the alteration of the Guardus programming. When this option is switched on, the password must be immediately given and then confirmed. If this option is already selected and you want to alter the current password, click on 'password'.

Note:

If you opt for the use of a password, remember that it is a password like any other, that is, the only way to alter the Guardus programming will be by completely clearing its memory through the diagnostic and memory test options. We thus strongly recommend that great care is taken not to lose or forget the password.

- **Demanding the patrol officer identification at the start of each round -** this option demands that a patrol officer **iButton/TagRF** is read so that the checkpoints can be recorded by Guardus. A round can therefore only be carried out after the identification of the patrol officer responsible for recording the checkpoints.
- **Accepting checkpoint iButtons/TagRF outside the schedule. -** allows the configuration of Guardus to allow the reading of any control point, outside the established schedule. By activating this option you will also be enabling the option 'Allow checkpoints to be revisited within one round'
- **Allowing checkpoints to be revisited within one round -** allows Guardus to record a checkpoints more than once. It will be possible therefore to record the time for which the patrol officer remained at the checkpoint through the arrival and departure records. This option will only be enabled if the option 'Accept **iButtons/TagRF** outside the schedule' is selected.

Note:

*Guardus will only accept that the same **iButton/TagRF** is read again 30 seconds after the first reading.*

Programming for use with Remote-i

Remote-i is a family of equipment manufactured by Contronics which allows the remote downloading of Guardus data via a modem, through a telephone line or via an Ethernet network. As the name suggests, Remote-i devices are used when it is necessary for Guardus to communicate with a computer remotely (or from a distance).

The integration of PROGuard with Remote-i assumes the utilization of a software module supplied by Contronics, called a Communication Center. There are some versions of PROGuard which have a built-in Communication Center, and are automatically installed together with PROGuard. For other versions of PROGuard the Communication Center needs to be installed separately. Contact Contronics in order to find out which applies in your case.

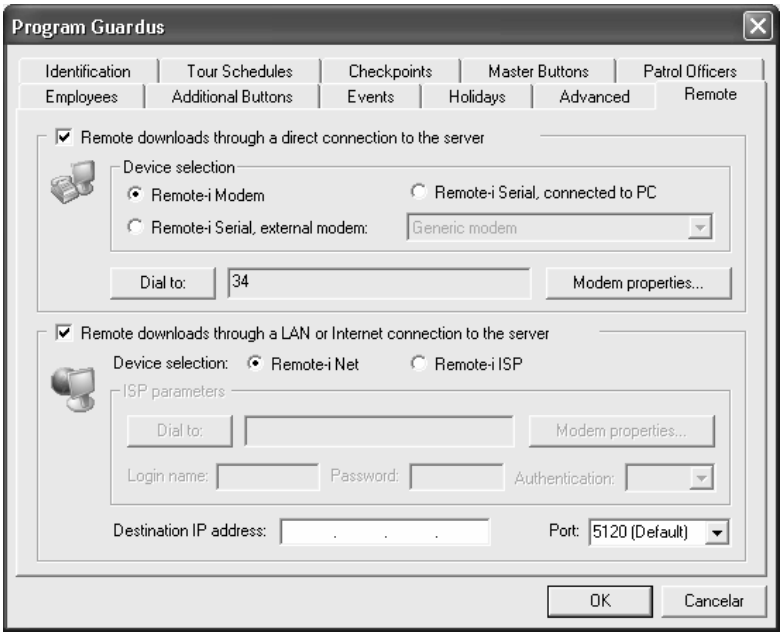
Note:

The Contronics Communication Center, or simply Communication Center, evolved from the software which was previously called "Remote-i Server". All of the features of the "Remote-i Server" are available in the Communication Center, with many other features added. Consult the Communication Center manual to find out more about it.

Attention!

The configuration of Remote-i will work only on the operating systems currently supported by Microsoft®, that is, Windows 98 or above.

See the following window in which the Remote-i parameters are programmed:



There are two distinct groups of options in the above window: 'Remote downloads through direction connection with the server' and 'Remote downloads through a connection via a TCP/IP network or the Internet with a server'.

The first group of options -'Remote downloads through direction connection with the server' - must be selected when using the Remote-i Serial or the Remote-i Modem. In this case, the Remote-i Serial can be connected directly to the computer serial port or connected to an external modem, not supplied by Contronics. This option does not involve the use of a TCP/IP communication protocol.

The second group of options - 'Remote downloads through a connection via a TCP/IP network or the Internet with a server' - must be selected when using Remote-i ISP and/or Remote-i NET. This option involves the use of a TCP/IP communication protocol.

Note:

Remote-i ISP and Remote-i NET use the same TCP/IP data communication protocol as Internet and Ethernet (local network).

When the option 'Remote downloads through direct connection with the server' is selected, it will then be necessary to selected the type of equipment:

- **Type of Equipment –** State here whether you are using Remote-i Modem, or Remote-i Serial connected directly to the computer or Remote-i Serial with an external modem. In the latter case it will also be necessary to select the brand and model of the modem used. The driver specific to that modem needs to have been previously installed on your computer.

  Note:

  *The software known as the **driver** is always supplied by the modem manufacturer, and must be already installed on your computer. If it is not, the modem will not be recognized by PROGuard, and its Brand/Model will not appear on the list of modems available.*

If one of the options 'Remote-i Modem' or 'Remote-i Serial with external modem' has been selected, it will be **necessary** to give the telephone number which the Remote-i Modem or the external modem will dial. Click on the control 'Dial' and fill in the fields as requested. See the item 'Dial-up Information' later in this manual.

- **Modem Properties:** This control is selected when 'Remote-i Modem' or 'Remote-i Serial with external modem' is selected. See below a description of these properties and of the window which is shown by PROGuard.

When the option 'Remote downloads through a connection via a TCP/IP network or the Internet with a server' is selected, it will then be necessary to select whether only a Remote-i Net or a Remote-i ISP will be used.

- 'Remote-i NET or Remote-i ISP': select this option if you are using only a Remote-i ISP or a Remote-i ISP together with a Remote-i NET.
- 'Remote-i NET' only: select this option when using Remote-i Net and there is not a Remote-i ISP. In this case it will be necessary to give only the destination IP address and the communication port of the TCP/IP protocol. Consult the

computer network administrator or an IT/Support specialist in your company to find out which numbers are to be given in this field.

When the option 'Remote-i NET or Remote-i ISP' has been selected, the following options will be activated and should be given:

Dial: On clicking on 'Dial' a window will appear requesting information regarding the telephone number which Remote-i will dial when Guardus is inserted into it. See the item 'Dial-up Information' later in this manual.

Modem Properties: On clicking on this control the same window as that mentioned in 'Remote downloads through direct connection with the server' will appear. However, different parameters may be given in the two windows. See a description of these properties and of the window which will be shown by PROGuard later in this manual

User: Give here the user name with which you or your company are registered on the ISP.

Note:
ISP stands for Internet Service Provider. It is the Internet access provider. In order for it to be possible to use the Remote-i ISP and transmit data through the Internet via a telephone line dial-up, you will need to use an ISP, whose services need to have been previously requested. In Brazil there are many companies providing ISP services, some even free of charge. On registering with an ISP, it will provide a user name and password.

Password: State here your ISP identification password.

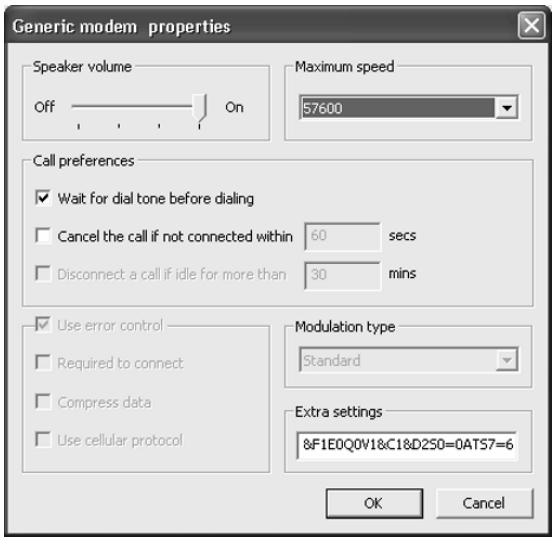
Authentication: State which is the method of authentication used by the ISP which you are using. This information must be

obtained from the company which is providing the ISP service. It can be CHAP (most common) or PAP.

Modem Properties

When necessary, some parameters can be adjusted in order to better the performance of the modem which will be connected to Remote-i.

See details of these parameters in the following window:



Some of these options may not be available since they are dependent on the type of modem selected. In the example in the above window, the option 'Use cellular protocol' is not available because it is not supported by the modem in question.

Remember that the dialogue box shown above as an example may vary, depending on the software application, or may even not exist. The parameters available in most cases are as follows:

- **Speaker volume -** Select here if you wish to listen to, through the modem speaker, the telephone line signals and sounds emitted during the dial-up process and the attempt to

establish a connection. The speaker is always switched off automatically after the connection has been established.

- **Maximum speed -** determines the fastest communication rate which the modem will use. The communication speed will be limited by the value specified here.

In the group **Call preferences**, there are three options:

- **Wait for a signal before dialing -** if this option is selected, the modem will wait for a dialing tone before trying to dial. This option is useful when you have a telephone apparatus connected on the same line, since it will prevent the modem from dialing when the line is in use. On the other hand, it is recommended that you deactivate this option if you are using PABX, since some PABX give a different tone, which is not compatible with the technical regulations, and is often not recognized by the modem. It is important that you know that using a PABX is possible, though not recommended.
- **Cancel call if not connected within 'x' seconds -** this option allows a maximum time for the connection attempt to be determined. If the modem does not manage to establish a connection in the time specified, the connection will be cancelled.
- **Disconnect call if not active for more than 'x' minutes -** this option determines the maximum permissible time for the telephone line to be silent, without any data being passed along it.

In the group **Use error control** you can, if you wish, enable your modem to carry out the control of errors in the transmitted and received data. When connected, the following options will be offered:

- **Required for connection -** when selected, allows the connection to be established only with modems which accept the error control protocol. If the modem is connected to the Remote-i Server it will not accept the error control protocol and the connection will not be established. If this option is NOT selected, then, the connection will be accepted even if

the modem connected to the Remote-i Server doesn't accept the error control protocol.

- **Compacting data** - when this option is selected the modem will use its compression algorithms in the data transmitted and received. The other modem connected to the Remote-i Server must support this option.
- **Using cellular protocol -** select this option when you wish to use a special protocol, developed for reducing communication errors which normally occur when cellular phones are used.

In the group "**Type of modulation**" you can select the modulation standard used by your modem. We recommend that you keep the standard option selected. If you change this option make sure that the modem connected to the Remote-i Server also accepts the type of modulation selected.

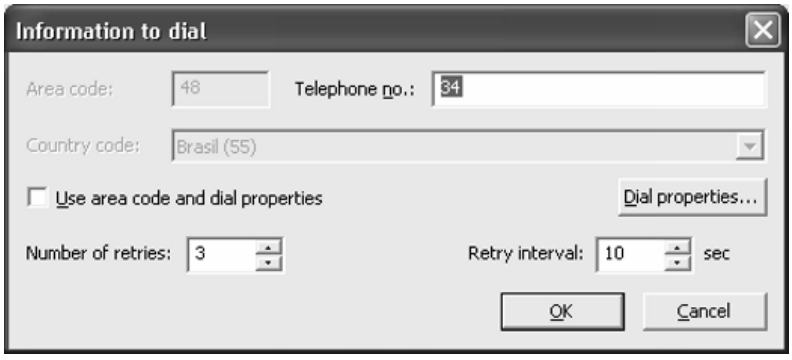
In the group "**Additional configurations**" there is only one field which allows the inclusion of configuration commands which the Remote-i will send to the modem during the start-up. The commands follow an AT format (however, not including the prefix 'AT'). This additional configuration must be used only for clearing, and only by personnel experienced in data communication and modems.

Note:

For more details on the installation and configuration of the Remote-i line, consult the manual which accompanies the equipment.

Dial-up Information

During the Guardus programming, in the 'Remote-i' guide, when clicking on 'Dial' the following window will be shown:



- **Area code -** this field contains the area code of the telephone number to be dialed, that is, the number where the Contronics Communication Center is connected. This field will be deactivated when the option 'Use Area code and Dial-up Properties' is not selected.
- **Telephone number -** this field must be filled in with the telephone number to which the Remote-i or the modem will dial, that is, the telephone number where the Contronics Communication Center is installed.
- **Country code -** this list allows you to select the country to where the Remote-i or modem will dial, that is where the Contronics Communication Center is installed. This field will be deactivated when the option 'Use Area code and Dial-up Properties' is not selected.
- **Use area code and dial-up properties -** this option determines whether the Remote-i or modem will use only the telephone number when dialing, or if the area code, country code, external line access code, card information and others will be considered.
- **Dial-up properties -** this allows you to configure the dial-up information such as:
  - External line access code if you are using a PABX, (which is not recommended);
  - Place from where you are dialing;
  - Dial-up regulations for your area.

This field will only be available when the option 'Use Area code and Dial-up Properties' is selected.

- **Number of attempts –** is the number of attempts which the Remote-i will make before managing to connect to the Remote-i Server and download the data successfully. The number given will be the total number of attempts.
- **Interval between attempts:** - is the time in seconds for which the Remote-i will wait between attempts.

Data Files Generated by PROGuard

PROGuard stores data downloaded from Guardus in files generated on the computer. There follows information regarding how these files are managed by PROGuard.

The data received during a Guardus download are always stored in the directory

C:/Program Files/Contronics/PROGuard/Download

unless, during the installation of PROGuard, you specified a directory different to that suggested. In this case, the data will also be stored in the directory called Download, however, it will be found below the place which you suggested.

When Guardus is first downloaded in PROGuard, the file generated will have the name

GRDxxxxx.DWL

where xxxxx are the last 5 digits of the serial number of the Guardus downloaded.

For example, on downloading for the first time the Guardus serial number 72 - 00 00 00 00 2C 25 – 2D will be generated in the file GRD02C25.DWL in the directory Download. The file GRD02C25.DWL will contain a complete program of all data downloaded from the Guardus.

For the downloads which follow (and not for the first download) from the same Guardus, one of two situations may occur:

1. Guardus did not have its programming changed, **and** since the previous download up to the current download its memory did not '**turn**'.

Note:

The Guardus data memory is circular, that is, Guardus always stores new data in the memory position following the last data inserted. But what happens when the Guardus data memory is completely full and there are new data to be inserted? In this case, Guardus stores the new data in the memory position previously occupied by the old data, i.e., the old data are deleted. That is, when its memory is full, Guardus begins to store data again from the point where the memory begins. This procedure is called ***'turning'****.*

In this case the file GRDxxxxx.DWL generated during the previous download is overwritten by a new file with the same name, only a single file remaining containing data from this Guardus. Note that there is no loss of data, because the new GRDxxxxx.DWL file will contain all the data from the previous download plus the new data.

2. Or Guardus did have its programming changed since the previous download, or its memory 'turned': In this case, the file which was previously called GRDxxxxx.DWL is now renamed GRDxxxxx.XXX, where XXX is a number between 000 and 999. The new downloaded data will be stored in a new file with the name GRDxxxxx.DWL.

Example:

Let's return to the example given above, where we were downloading the Guardus with the serial number

72 - 00 00 00 00 2C 25 – 2D.

Since this is not the first time that this Guardus is downloaded, there will therefore be, in the Download directory, a file named GRD02C25.DWL. During the new download process, this file will be renamed GRD02C25.000, and the data originating from the new download will be stored in a new file named GRD02C25.DWL.

When a further new download occurs under the same conditions, at the time of download there will already be, in the Download directory, the files named GRD02C25.DWL and GRD02C25.000. Thus, the file GRD02C25.DWL will be renamed GRD02C25.001, and a new file named GRD02C25.DWL will be created containing the current download data.

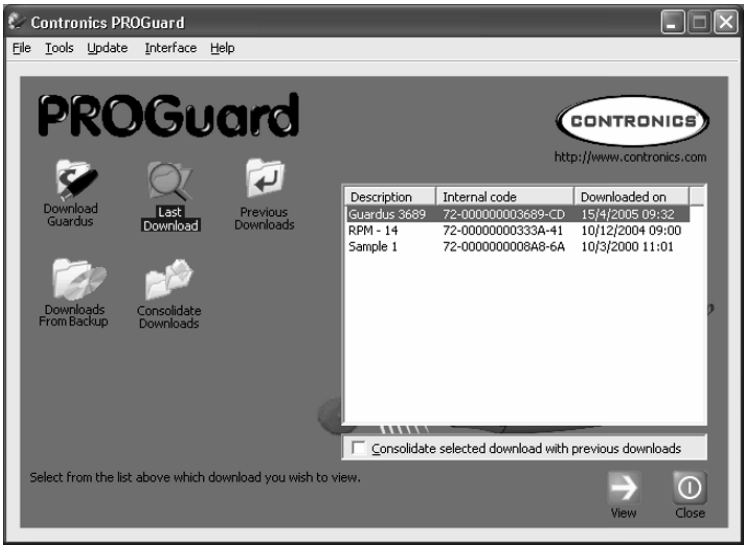
As you can see, the file GRDxxxxx.DWL will always contained the latest download data from the Guardus whose serial number ends in xxxxx.

Downloads

Viewing latest downloads

PROGuard allows the latest download from each Guardus to be quickly viewed through the option 'Latest downloads' in the main window. Click on the icon 'Latest Downloads' in the main window and then select, from the list which will be shown, the Guardus whose latest download you wish to see.

See below the initial window, with the list of downloads:



Note that in the list of downloads only the latest download from each Guardus (therefore, only the files with the name GRD0xxxxx.DWL in the Download directory) will be shown.

If the option 'Consolidate selected download with previous downloads' is off, only the data in the files named GRD0xxxxx.DWL will be considered. (If you wish to understand this better, read the item 'Data Files generated by PROGuard' in this manual.)

If the control 'Consolidate selected download with previous downloads' is on, then, information stored in the file GRDxxxxx.* found in the directory Download will be included in the reports which are generated (where * can be the number between 000 and 999 plus the

file .DLW). However, of these files, those which have a programming different from that in the file GRD0xxxxx.DWL will not be considered.

Example:

The Guardus with the serial number 72 - 00 00 00 00 2C 25 – 2D is programmed on January 1st.

On January 7th, this Guardus is downloaded, generating the file GRD02C25.DWL.

On January 14th, it is downloaded for the second time. Since January 1st the Guardus memory did not 'turn' and, thus, the file GRD02C25.DWL is overwritten with new data.

On January 17th, the Guardus data memory was full and its memory therefore 'turned'.

On January 21st, it is downloaded for the third time. The file GRD02C25.DWL is renamed as GRD02C25.000 and a new file GRD02C25.DWL is created.

On January 28th, it is downloaded for the fourth time. The file GRD02C25.DWL is renamed as GRD02C25.001 and a new file GRD02C25.DWL is generated.

After the download, the PROGuard option 'Latest downloads' is entered and the same Guardus is selected. If the option 'Consolidate selected download with previous downloads' is not on, the data shown in the report will include only the data contained in the file GRD02C25.DWL. If this option is on, the data contained in all of the files (GRD02C25.000, GRD02C25.001 and GRD02C25.DWL) will be included.

After these reports are viewed and printed the programming of this Guardus is changed.

On February 5th, Guardus is downloaded for the fifth time. The file GRD02C25.DWL is then renamed as GRD02C25.002 and a new file GRD02C25.DWL is generated. Note that since January 28th, when the Guardus was programmed, its memory did NOT 'turn', but even so the old file GRD02C25.DWL is now renamed GRD02C25.002 because that file GRD02C25.DWL reflected the previous programming.

On February 12th, it is downloaded for the sixth time. The file GRD02C25.DWL is overwritten with new data.

On February 14th, the Guardus memory was full and, thus, the memory 'turned'.

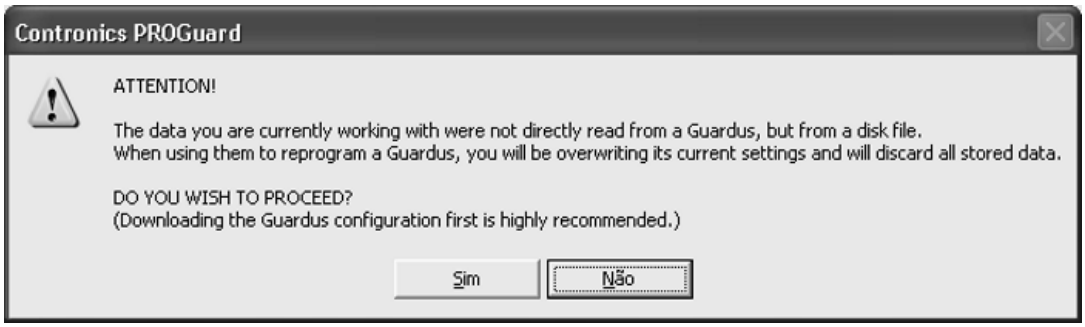
On February 19th Guardus is downloaded for the seventh time. Now the file GRD02C25.DWL is renamed as GRD02C25.003 and a new file GRD02C25.DWL is created.

After the download, the PROGuard option 'Latest Downloads' is entered and the same Guardus is selected. If the option 'Consolidate selected download with previous downloads' is not on, the data shown in the report will include only the data contained in the file GRD02C25.DWL. If this option is on, the reports will include only the data in the files GRD02C25.DWL and GRD02C25.003. The data contained in the files GRD02C25.000, GRD02C25.001 and GRD02C25.002 cannot be included the report because they were generated when this Guardus programming was different to the current one.

On clicking on 'View', the PROGuard report window is displayed and the data can be consulted as if they had been recently downloaded.

In order to obtain detailed information on how to work with reports consult the item *Downloading a Guardus*, in this manual.

Note that, in the programming report window, the option 'Reprogramming' is available. If this feature is selected, make sure that the Guardus which will receive the programming has been previously downloaded, if not, its data will be erased and it will not be possible to recover them. The following window shows the warning message:



Viewing Previous Downloads

PROGuard allows the previous downloads of each Guardus to be quickly viewed through the option 'Previous downloads' of the main window. On selecting it, all of the previous downloads (or that is, those which are **not** the latest download from each Guardus) which were in the Download directory, of each Guardus, will be shown.

See below the initial window with the list of all the previous downloads:

Note that in this list of downloads shown in this option, all of the downloads which are located in the Download directory and do not have a file name with the extension .DWL, are included. This means that all of the files whose names follow the format GRDxxxxx.XXX, where xxxxx are the last digits of the serial number of the Guardus and XXX is a number which varies between 000 and 999, will be shown. In contrast, the list of downloads which is shown in the previous option ('Latest downloads') shows only the files whose names have the extension .DWL.

If the option 'Consolidate selected download with previous downloads' is off, only the data contained in the selected file will be considered.

If the option 'Consolidate selected download with previous downloads' is on, then in the report which will be generated, information stored in the files GRDxxxxx.YYY located in the Download directory (where YYY is a number between 000 and 999 less than XXX) will be included. However, of these files, those with a different programming to that of the file GRD0xxxxx.XXX, will not be considered.

Example:

In the Download directory there are the following files: GRD02C26.DWL, GRD02C26.002, GRD02C26.001 and GRD02C26.000.

Let's suppose that the programming of this Guardus has not been changed since the first download was carried out. In the list of downloads, the following downloads will appear:

GRD02C26.002
GRD02C26.001
GRD02C26.000

If we select the download GRD02C26.001, keeping the option 'Consolidate selected download with previous downloads' off, and then we click on 'View', the reports which will be generated will consider only the data of that download. However, if the option 'Consolidate selected download with previous downloads' is on, then the reports will include data from the three downloads.

Another example: Let's return to the example given in the previous item and take a look the behavior of PROGuard in the option 'Previous downloads':

The Guardus with the serial number 72 - 00 00 00 00 2C 25 – 2D is programmed on January 1st.

On January 7th, this Guardus is downloaded, generating the file GRD02C25.DWL.

On January 14th, it is downloaded for the second time. Since January 1st the Guardus memory did not 'turn' and, thus, the file GRD02C25.DWL is overwritten with new data.

On January 17th, the Guardus data memory was full and its memory therefore 'turned'.

On January 21st, it is downloaded for the third time. The file GRD02C25.DWL is renamed as GRD02C25.000 and a new file GRD02C25.DWL is created.

On January 28th, it is downloaded for the fourth time. The file GRD02C25.DWL is renamed as GRD02C25.001 and a new file GRD02C25.DWL is generated.

After the download, the PROGuard option 'Previous downloads' is entered and the download GRD02C25.001 is selected. If the option 'Consolidate selected download with previous downloads' is not on, the data shown in the report will include only the data contained in the file GRD02C25.001. If this option is on, the data contained in the files GRD02C25.000 and GRD02C25 will be included.

After these reports are viewed and printed the programming of this Guardus is changed.

On February 5th, Guardus is downloaded for the fifth time. The file GRD02C25.DWL is then renamed as GRD02C25.002 and a new GRD02C25.DWL is generated. Note that since January 28th, when the Guardus was programmed, its memory did NOT 'turn', but even so the old file GRD02C25.DWL is now renamed GRD02C25.002 because that GRD02C25.DWL reflected the previous programming.

On February 12th, it is downloaded for the sixth time. The file GRD02C25.DWL is overwritten with new data.

On February 14th, the Guardus memory was full and, thus, the memory 'turned'.

On February 19th Guardus is downloaded for the seventh time. Now the file GRD02C25.DWL is renamed as GRD02C25.003 and a new file GRD02C25.DWL is created.

After the download, the PROGuard option 'Previous Downloads' is entered and the download GRD02C25.003 is selected. It doesn't matter whether the option 'Consolidate selected download with previous downloads' is on or not, the result of the reports will be the same because there is not another file referring to the same Guardus which has been generated with a programming the same as that of the selected file GRD02C25.003.

On the other hand, if the download GRD02C25.002 is selected and if the option 'Consolidate selected download with previous downloads' is not on, the data shown in the report will only include the data contained in the GRD02C25.002 file. But if this option is on, the reports will also include the data in the files GRD02C25.000 and GRD02C25.001 (as well as the data in GRD02C25.002), because all of these downloads have the same programming.

Consolidating PROGuard Downloads

On activating, in the main window, one of the options 'Latest downloads' or 'Previous downloads', the selection box 'Consolidate selected download with previous downloads' will be shown directly below the list of downloads.

The consolidation only occurs with downloads which are from the same Guardus (that is, the same serial number) and are older than the one selected.

Select this option to consolidate several downloads.

However, as has been explained above, in order for the consolidation to occur, the downloads must have the **same programming**. If there is one or more download which does not have exactly the same programming as the selected download, these different downloads cannot be included in the consolidation.

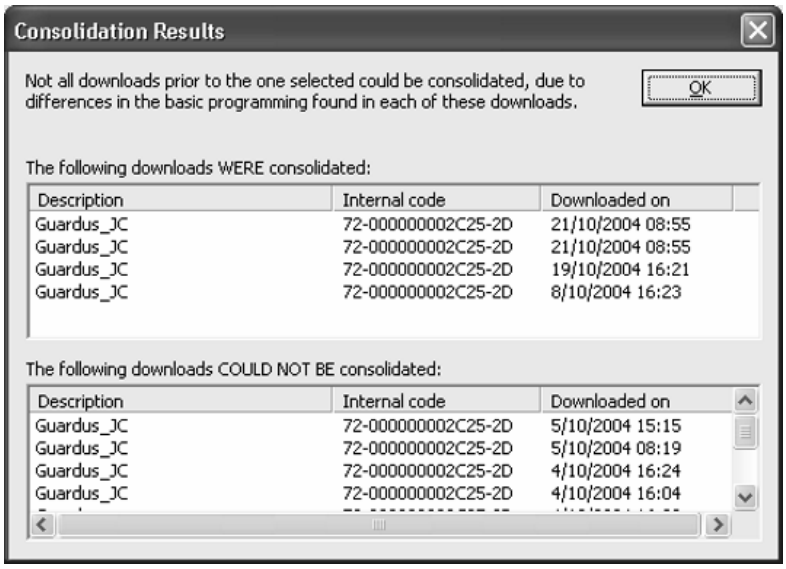
Attention!

Program planning is very important to obtaining a good consolidation result. A programming which suffers frequent alterations in the round schedules will not benefit from the consolidation.

In the following window there is an example of the consolidation of a download from Guardus North Base 2954, which occurred on 23/08/2004 at 10:39, with the previous downloads from the same Guardus:

On selecting 'View', a window showing which downloads which were and were not consolidated will be shown. On closing it, the consolidated reports will be displayed.

If all of the downloads previous to the selected one satisfy the consolidation criteria, the consolidation reports will be shown immediately. As a consolidation result requested in the previous window, we have:



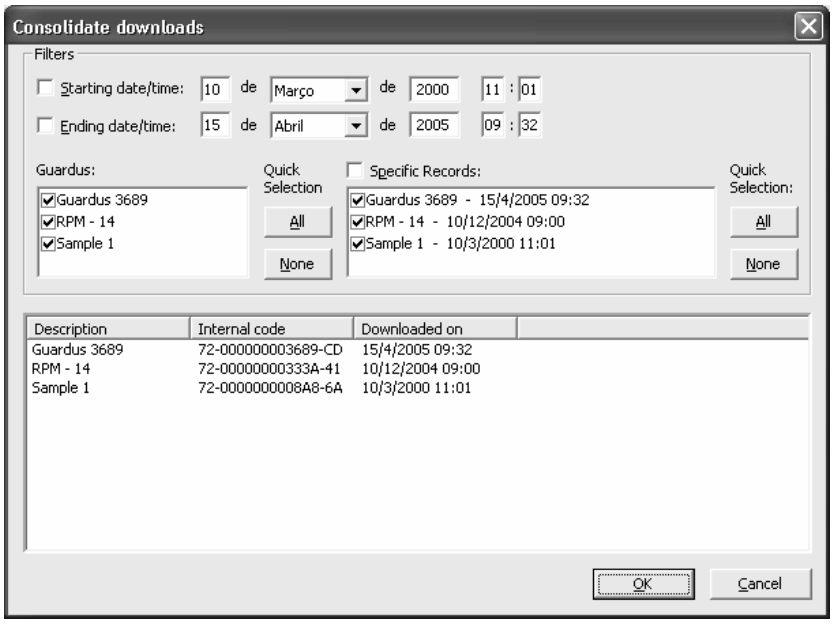
Consolidating Multiple Guardus Downloads

The consolidation carried out through the 'Consolidating downloads', in the initial window, allows the widening of the consolidation benefits not only for the downloads from the same Guardus which have different programming, but also from different Guardus wands.

Note:

The downloads which in the previous example could not be included in the consolidation, can now be included with the use of a resource called 'Consolidating Multiple Guardus Downloads'.

The following window gives the filter options which aid in the task of choosing the downloads to be consolidated:



Note:

Through this resource for the consolidation of multiple Guardus wands it is possible to generate the Exceptions, Full and Frequency reports. The other reports cannot be generated since they do not have any practical use.

The description and meaning of the 'Filters' group is given as follows:

- **Start Date/Time -** allows the input of the start date and time of the downloads which will be given in the window. Initially, the 'Initial Date/Time' comes filled in with the oldest downloads in the directory where the PROGuard downloads are found.
- **End Date/Time -** allows the input of the date and time up to which you wish to see downloads listed. Initially, the 'End Date/Time' comes filled in with the date and time at which the window is shown.
- **Downloaded Guardus -** select here all of the Guardus to be consolidated.
- **Specific Downloads –** here you select which downloads from all of the Guardus selected will be consolidated. On finishing the selection activate the verification box in order to carry out the consolidation. Thus, the Exceptions and Full reports, generated by this consolidation, will show in a unified way, the data contained in the downloads selected form the Guardus chosen.

Tip:

The options 'All' and 'None', in the item 'Rapid selection' speed up the tasks which require the activation or deactivation of all the Guardus or all the downloads.

Backups

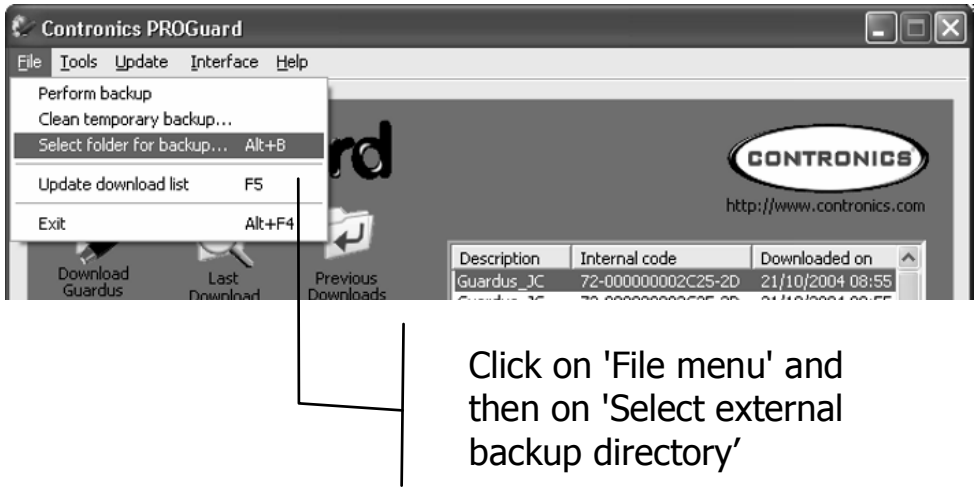
Creating backups on Disk

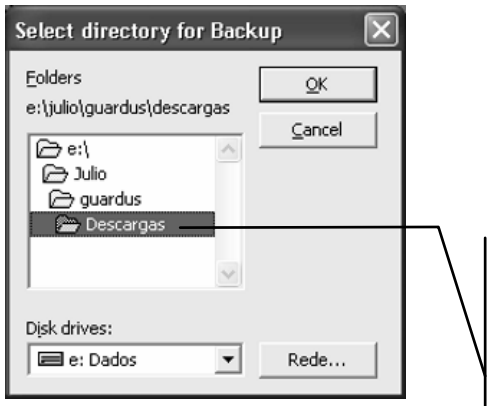
It is necessary to periodically create backups of the data downloaded from the Guardus wands and stored on your computer. For this, PROGuard includes a backup facility, which is the process of copying information which is on the computer hard disk to another media, which can normally be removed and kept separately.

Note:

In the example of how to create a backup, shown below, a folder which has previously been created will be used. Before starting any backup process create a folder which will store your files.

This is a simple task:





In this window you must choose the folder which you have already created by clicking twice on it and then on 'OK'.

Click again on the 'File menu' and choose the option 'Create backup', a window will then appear as shown in the figure below.

The procedure carried out to 'Create backup' includes all of the GRDxxxxx.XXX files, where xxxxx are the last digits of the Guardus serial number and XXX is a number which varies between 000 and 999. These files will be copied from the Download directory to the directory configured in the option 'Select external backup directory'.

Viewing Backup Data

The data saved in the backup procedure can be viewed and used to generate reports. For this, go to the main PROGuard window, click on the icon 'Backup Downloads', and you will see the following:

Here the previously created backups which are found in the external backup directory are listed.

Here the directory where the backups are stored is shown.

Note:

After selecting the directory where your backups will be stored, PROGuard records it. Then, whenever it is run, the backup will be stored in this location.

To change the location of your Backup, you can click directly on the 'search' option in the left panel of the previous figure.

In general, the viewing of 'Backup Downloads' works in the same way as the viewing of 'Previous Downloads'. The only difference is that 'Backup Downloads' searches the data (or files) in the directory selected

as the backup directory. 'Previous Downloads', on the other hand, searches the data (or files) in the Download directory.

Note that 'Backup Downloads' also gives the option 'Consolidate selected download with previous downloads'. This option behaves exactly as the option 'Previous Downloads'. See an explanation of this option in the item 'Viewing Previous Downloads', in this manual.

Attention!

If there are no backups stored in the selected directory, the list will be empty and the 'OK' option will not be available.

Records

Recording Patrol Officers and Employees

Through Guardus you can record the **iButtons/TagRF** of the patrol officers and other personnel, which allows the frequency control. Among the many possibilities open for this feature is the exportation of data to Human Resources or Payroll software, not supplied by Contronics.

***Tip**:*

*In order for Guardus to read and process the **iButtons/TagRF** of the patrol officers and other personnel, they need to have been previously registered in PROGuard, as described earlier in this manual.*

The patrol officer and employees **iButtons/TagRF** readings can only be viewed through the full and frequency reports in PROGuard.

Guardus provides the option to give the round results on reading the patrol officer **iButton/TagRF**, and this is carried out in the same way as the master **iButton/TagRF**. This option is programmable and is initially switched off. Its use is important mainly for a patrol officer, on taking over the rounds and receiving the Guardus from another patrol officer, to be aware of whether he received Guardus with round failures or not.

Attention!

*In contrast to what occurs with the master **iButton/TagRF**, on signaling the round status after reading the patrol officer **iButton/TagRF**, Guardus will not signal 'rounds completed' after a new round is correctly carried out.*

***Note**:*

*One difference between the patrol officer **iButton/TagRF** and that of other personnel is that the former is attributed the responsibility for the rounds, unlike the latter.*

Recording Numerical Events

Guardus automatically recognizes the reading of **iButtons** installed in the Numerical Events Keypad, without the need to have previously registered or programmed these **iButtons**. See the item 'Registering Events' in this manual.

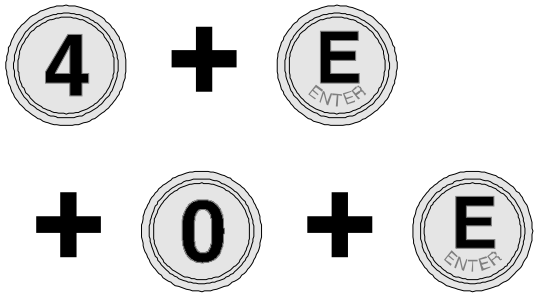
Only registered events will be interpreted. The other events will be listed in the reports, although only with their numeric code, without a description.

The events can be used to record abnormal situations noticed by the patrol officer during a round or to make a note of observations of a supervisor regarding a patrol officer or other personnel. To record an event relating to a checkpoint, the patrol officer must, soon after recording the checkpoint, read sequentially the **iButtons** corresponding to the digits which comprise the appropriate event code. To end, he must record the **iButton** marked as ENTER.

Note:

*At any time, before reading the **iButton** ENTER during the recording of a numerical event, the **iButton** marked as CLEAR can be recorded in order to restart the numerical event information.*

For example, to Record events 4 and 10 the following contacts must be made:



Remember that the **iButton** marked as CLEAR allows data given by mistake to be corrected. For example, if you wish to record event 4 and you record, by mistake, event 5, this situation can be corrected in the following way:

Tip:

Use of the upper flap of the Numerical Events Keypad (covered in transparent plastic) to insert a printed description of the most important event codes which can be recorded by the patrol officer.

If the event being recorded requires a numeric reference, then this must be given immediately after the ENTER which follows the event code.

Frequently Asked Questions

Situation 1

An interface (Serial communication cable, Download-i USB, Download-i Serial) is connected, but PROGuard states that it cannot find it, thus not allowing the Guardus data to be downloaded.

Message shown:

Possible solutions:

- If you are using Download-i USB, check that the USB driver has been previously installed.

  Note:
  The USB Driver is a software module supplied by Contronics which needs to be installed on your computer so that the Download-i USB interface can be recognized before PROGuard is run. There is a explanation leaflet showing how to install the USB Driver which comes with the Download-i USB. Before carrying out the USB Driver installation procedures, close PROGuard.

- Check that the interface is correctly configured. Go to the main window, and into the option 'Interfaces'. If you are using the Serial Communication Cable, Download-i Serial or Remote-i Serial make sure that the option 'Serial' is selected.

If you are using Download-i USB, select 'USB'. See the window below:

- If you are using a Serial Communication Cable, Download-i Serial or Remote-i Serial: if your computer has three serial ports installed (as for example, COM1, COM2 and COM3), try installing the connection cable in the port which does not share resources and has the lowest number. (COM1 and COM3 share the same computer IRQ interruption line, as do COM2 and COM4). If you have COM1, COM2 and COM3 installed on your computer, the best option is to use COM2 for the communication cable, since of the ports installed, this is the one which does not share resources.

- Make sure that the connector chosen really corresponds to a serial port (some computers have connectors which are not effectively connected to the system).
- Windows does not allow a serial port to be used to more than one end at the same time. So, if you disconnect the mouse, for example, and connect a communication cable in its place,

PROGuard will not be able to use that serial port until your computer is restarted.

- On some computers, PROGuard does not work properly with FIFO reception buffers. In these cases it is necessary to configure the size of the reception buffer to a minimum value (1), through the advanced port configurations, accessible in Windows 98 through the Control Panel, 'System' icon, in the 'Device Manager' guide, selecting the desired port properties, 'Port Configurations' guide, 'Advanced' option. In Windows NT, a similar configuration may be carried out through the icon 'Ports' of the 'Control Panel'. The port in question must be selected from the list which will be shown and the option 'Configurations' must be selected. In the following window, select the option 'Advanced' and deselect the verification box 'Activated Queue'. If this configuration does not give the desired result (it may be necessary to restart the computer), revert to the previous configuration.

Situation 2

PROGuard seems to find the interface, because it does not show the message "It was not possible to start the communication interface", however, on attempting to download the Guardus data, nothing happens, and the following window keeps showing indefinitely.

Message shown:

Possible solutions:

- Check that the Guardus batteries are in good condition. Check that Guardus is working correctly. If you are using the model G3, G5 or G7, short-circuit its **iButton** reader head and you should hear a 'beep' sound while the short-circuit lasts. ATTENTION: Do not keep the head short-circuited for more than 10 seconds. If it does not emit this sound, Guardus is not working properly.
- If you are using a Serial Communication Cable, Download-i Serial or Remote-i Serial:

  a. If you have a modem installed on or connected to your computer, PROGuard may not properly detect in which port the interface is connected. If it is an external modem it is advisable to disconnect it when using PROGuard. If it is an internal modem configure it so that the serial port number associated with it is higher than the number of the serial port to which the cable is connected.

  b. The mouse was disconnected and in its place a serial communication cable or Download-i was connected without the computer being restarted. It is

recommended, in this case, that you disconnect and reconnect the mouse with the computer switched off.

c. Verify that your computer has a serial adapter with a UART capable of transmitting at 115,200 bps. UARTs which use 8250 (as with the old PC XT equipment) cannot transmit at 115,200 bps and, therefore, the communication with Guardus does not work.

- If you are using Download-i USB:

  Close PROGuard. Disconnect the USB cable which connects Download-i USB to your computer, wait 10 seconds and connect again. Run PROGuard and try to download Guardus. If this does not work, try this procedure again, repeating up to 5 five times. If this works then your Download-i USB may not be of a current version. In this case, consult your distributor and explain in detail the problem.