Most of Sensor controllers carry their firmware on a Flash chip which enables a quick update by sending the new firmware file through the host PC.
A new firmware file will be received directly from Sensor.
There is no need to update a firmware, unless you were asked to do so, (usually to add a new feature or to solve a bug).

The file can be sent only through the Sensor flash utility program: Flash2000.
Step 1:
Make sure the controller has a Flash firmware.
The easiest way to identify whether the controller is indeed a Flash one is by looking at its CPU.
All the Flash controllers have a sticker on their CPU with the word "BOOT" printed on it.
Step 2:
Make sure the Flash2000 is installed on your PC Go to Start-Programs and look for Flash 2000.
If it is not there, download and install from here The latest version is 1.7.0.
Step 3: Settings
Exit GuardPoint Pro (as well as any other program that might be using the COM port)
Run the program and set the following Time Out: 1500 Parallel waiting delay: 300 Com Port:
The number of the serial com used for connection (may be a virtual com in a case of TCP/IP connection Speed: Select the controller baud rate. (Be sure it can indeed communicate at this baud rate.
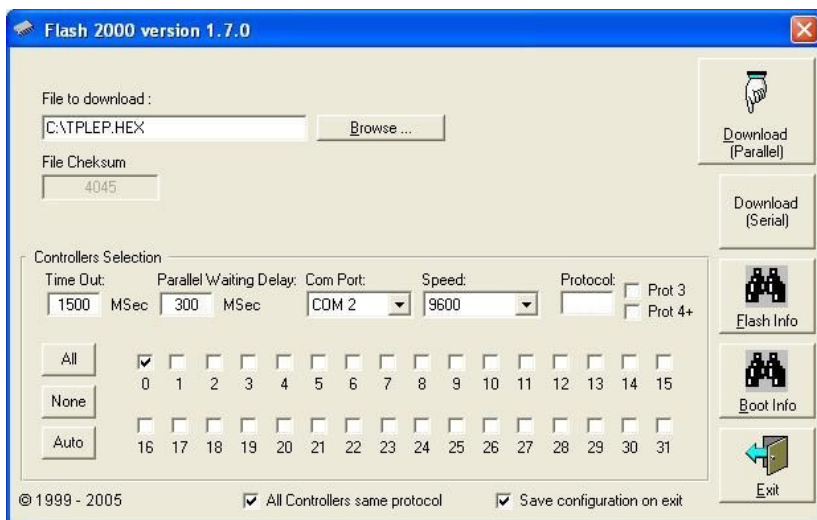The baud rate value can be seen, at the Tools-Option-Communication screen of GuardPoint Pro).
Protocol: "173" should be added in the Protocol Field.
Most buttons are grayed out until typing in the protocol.
Address (check boxes from 0 to 31):
Tick the controller(s) to which you like to read/modify the firmware. It is possible to select more than one controller.

Step 4: Using the Flash2000

Browse Button:

This is in case you are going to send a new firmware file, use this button to select the file.

Boot Info:

The boot info reads the firmware date of the CPU.

This is NOT the main firmware.

Click this button and you should see the same date as this of the sticker on the controller CPU, under the writing "BOOT".

Flash Info:

Reading the main firmware date and the checksum.

In case you have already selected a file through the "Browse" button, the program will compare the checksum of the file with that of the firmware found on the board, and if they are not identical a beep will sound and the checksum field will be shown red.

Download serial:

This will start downloading the new firmware to the controller(s).

With this option the program verifies each data packet immediately after it was sent.

In case you have selected more than one controller, the controllers will be updated one after the other.

Download time may take few minutes per controller.

Download parallel:

Firmware download without verifying the packets and with a parallel (simultaneous) update for all the controllers on the bus.

Download time may take few minutes and it is the same duration regardless of the amount of controllers.

Verifying the firmware was received successfully:

After download is finished, you should see the new firmware date with black fonts, indicating that the chip checksum is identical to the file checksum.

Step 5:

Initializing the controllers after the new download It is highly recommended to send a "complete initialization" through GuardPoint Pro once the controllers received a new firmware.

Advanced: Updating a firmware to controllers connected via TCP/IP:

The Flash2000 cannot be configured to communicate directly to a TCP port.

When there is a need to read/update firmware to controllers connected via TCP/IP, it must be done through a virtual com port.

Use only the virtual port program compatible to the TCP interface you have.

Examples: EXT-TCP / DS100-R / DS100-B (Tibbo): VSP manager Co-box / UDS-10 (Lantronix): ComPort Redirector Use the relevant program to define the virtual com port and then select the COM number you have defined there in Flash2000 "Com Port" field.