Alarm Control Panels

INTEGRA

FLASHX PROGRAM

Satel

GDAŃSK

CE

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1. GENERAL

The INTEGRA series alarm control panels are state-of-the-art, microprocessor-based devices, controlled by a memory-resident program. Our engineering department is doing its best so that this program can meet to the maximum possible extent the expectations and suggestions of installers and users of alarm systems. Consequently, the firmware of alarm control panels is continually upgraded and modified. To make the innovations available to all users, a firmware updating utility has been introduced in the INTEGRA alarm control panels. Updating is now possible owing to the FLASH type memory used in the construction of the panels. This type of memory makes the replacement of the control panel firmware an easy job which requires no physical removal of the chip from the main board (as it is the case with the EPROM memory). Hence, the alarm control panel already installed in the facility does not need to be dismounted. It is sufficient to connect the panel and the computer with a special cable, and then start the **FLASHX** program in the computer and the **STARTER** in the control panel ([Service code][*] →*Service mode* →*Restarts* →*Starter*). Replacement of the FLASH type memory is commonly referred to as "flashing".

Note: *Rewriting of the control panel firmware does not mean that the data previously entered by the installer and/or users will be lost. These data are protected and will remain unaffected by any firmware replacements.*

The control panel contains firmware which is up to date when leaving the production line. Therefore, it is recommended that the firmware version of the purchased unit be compared with that available at the web-site **www.satel.pl** and the latest version installed.

2. DESCRIPTION OF FLASHX PROGRAM

The FLASHX program is intended for firmware replacement in the INTEGRA control panels.

The program is available at the website **www.satel.pl**, where you can also find the current versions of the program for the INTEGRA series panels as well as information on the changes introduced in subsequent versions.

3. REPLACEMENT OF CONTROL PANEL FIRMWARE

1. Download a file with the latest program of the corresponding control panel and the FLASHX program from the website www.satel.pl. The file with the latest control panel program is available as a zip archive which should be unpacked when downloaded. It is recommended that the file with the latest control panel program be placed in the same directory as the FLASHX program.
2. Connect the control panel to the computer as shown in Fig. 1. Use the Com1 or Com2 computer communication port.

Notes:

- *Never short or touch the RS-232 interface pins with your fingers.*
- *Prior to connecting the cable, the installer should preliminary remove the electrostatic charge, e.g. by touching a grounded piece of equipment (faucet, heater, etc.) with the back of his hand.*
- *It is recommended that the cable be connected first to the control panel connector, and then to the computer connector.*

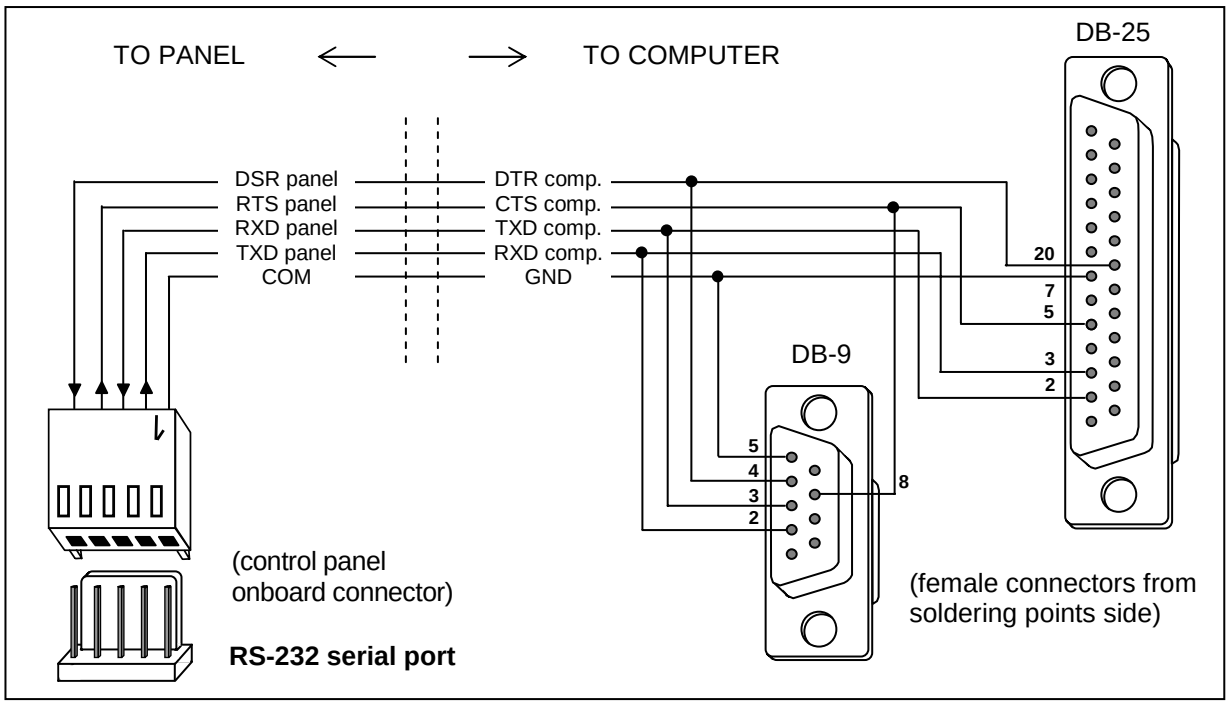

Fig. 1. Connecting computer to control panel serial port.

3. Launch the STARTER program in the control panel. This can be done in two ways:
   A. The basic method consists in calling the STARTER from the LCD keypad. To do so:
      - enter the service code and confirm by pressing [*];
      - select the SERVICE MODE in the menu which will appear on the display;
      - while in the service mode, enter the RESTARTS menu and select the STARTER function;
      - the following message will be displayed: „Start STARTER ? 1=Yes". Press the key 1 to confirm start of the function. Pressing any other key will be recognized as cancellation of starting the function.
   B. If for any reason the service mode cannot be started from the keypad (e.g. because of an defective program in the control panel), the STARTER can still be launched by using the, so-called, „hardware starting" procedure. To do so:
      - disconnect in turn the mains supply and the battery;
      - set a jumper on the RESET pins situated on the control panel board;
      - connect in turn the battery and the mains - the DIALER LED will start blinking (the control panel will not start, if it is connected to the battery alone);
      - remove the jumper quickly.

      Note: *If the jumper is not removed during the first second, the control panel will enter the service mode or start the downolading function (see: INSTALLER MANUAL →SERVICE MODE).*

4. Start the FLASHX program in the computer.

Notes:

- *Prior to starting the FLASHX program, make sure that none of the programs running in the computer (e.g. the. DLOADX) blocks the communication port.*
- *It is recommended that no programs be running in the background during firmware replacement.*
- *During firmware replacement, the mains supply and the emergency supply (battery)* ***must*** *be connected to the alarm control panel. This is required for safety reasons, that must be*

observed especially during replacement of the STARTER program. ***Lack of the battery may cause an error during the control panel programming procedure.***

5. Select the PROGRAM function in the PROGRAMMING menu (see Fig. 2).

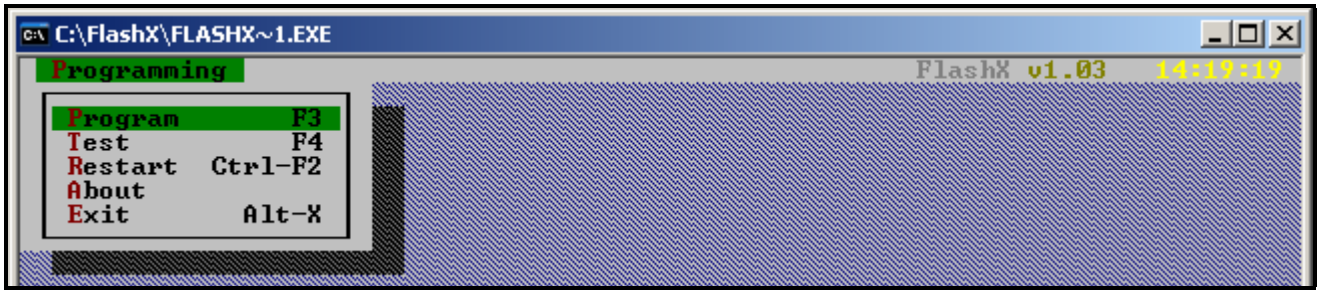

Fig. 2. Start of programming.

6. Highlight the file with new control panel program and open it.

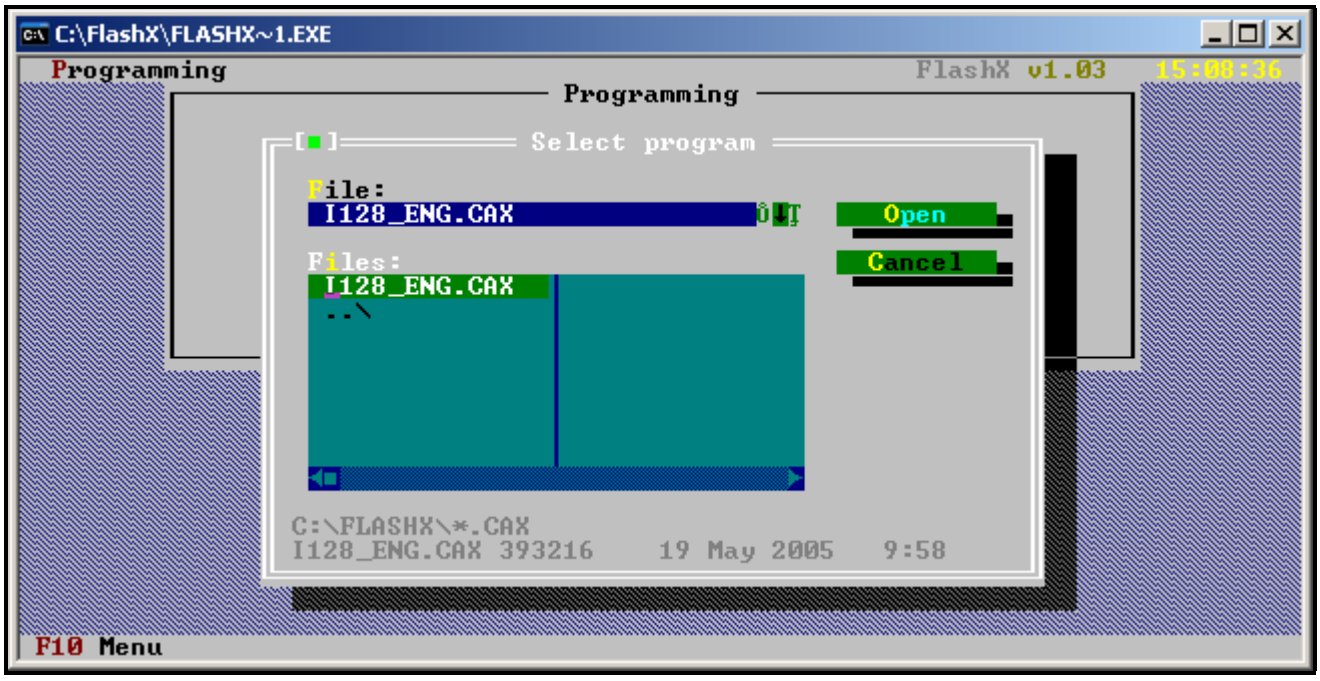

Fig. 3. Selection of new control panel program.

7. Highlight the computer port through which communication with the control panel will be effected.

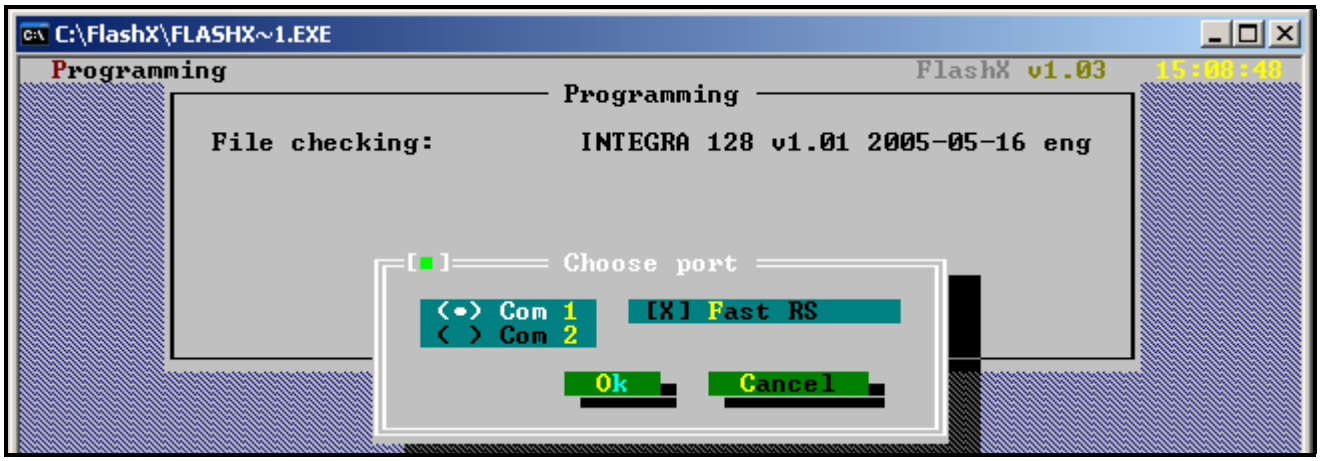

Fig. 4. Selection of computer port.

8. If the communication is properly established, the FLASHX will first verify whether the version of the STARTER program in the control panel is correct. If the STARTER program is

outdated, corrupted or in other language version, the FLASHX will suggest updating of the STARTER (see Fig. 5). If the STARTER in the control panel is not faulty, updating of the control panel firmware will be possible irrespective of whether the STARTER be updated or not.

Shown in Figures 6 and 7 are messages which are successively displayed when the STARTER updating option is selected. Where proper power supply is ensured and the outputs can be temporarily deactivated, it is possible to confirm in turn both messages.

Fig. 5. Information on incompatibility of the STARTER program in the control panel with the STARTER version in the FLASHX program.

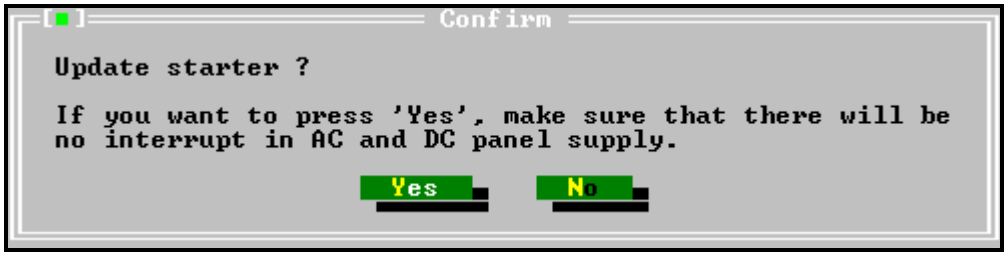

Fig. 6. Warning preceding the STARTER updating.

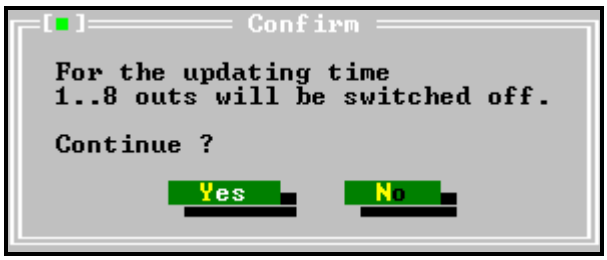

Fig. 7. Information on deactivation of outputs that precedes the STARTER updating.

After STARTER updating, FLASHX will automatically replace the control panel firmware.

9. If updating the STARTER program is not necessary, the FLASHX will check the panel firmware version and compare it with the program you want to write to the panel. Depending on whether the program to be saved is later, older, or the same as that in the control panel, a corresponding message will be displayed. You should take the right decision as to continuation of the replacement of control panel firmware.

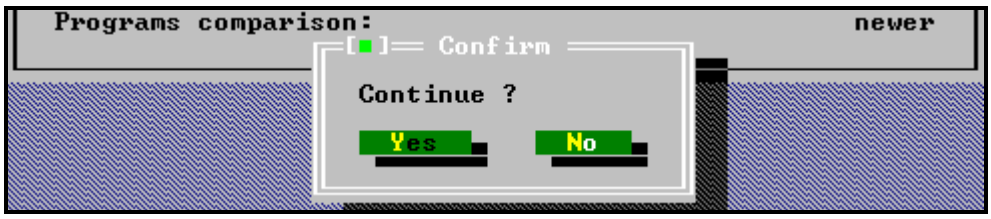

Fig. 8. The question which comes out when the version of the firmware to be saved is later than that in the control panel.

10. When the program is successfully installed, a message on completion of updating appears.

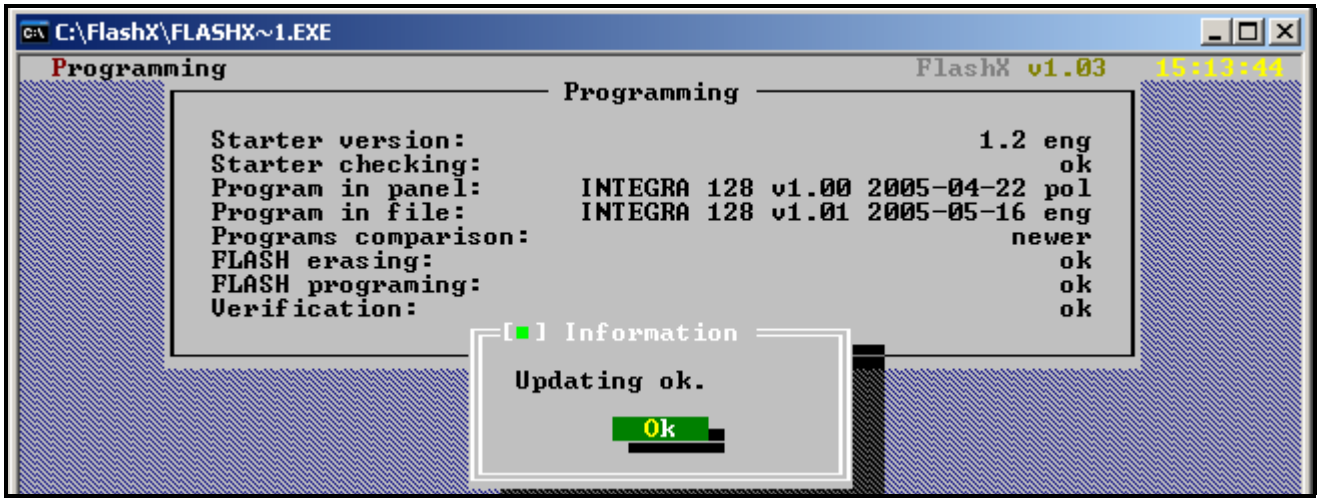

Fig. 9. Message displayed when replacement of the control panel program is complete.

11. Exit the FLASHX program. The procedure of firmware replacement is completed.

4. OTHER FUNCTIONS OF THE FLASHX PROGRAM

Test – this feature allows you to compare the program stored in the control panel with the selected control panel program in the computer resources.

Restart – this function makes restart of the control panel possible.

5. CONCLUSION

Should any problems occur during replacement of the FLASH memory firmware, please contact the Manufacturer's engineering department. When calling, you should communicate the number of keypad(s) / control panel firmware version.

Information on the control panel program version is displayed on LCD directly after the system is restarted.

Designation of the firmware version is also displayed after restarting the keypad processor. You can make the processor restart by simultaneously pressing and holding down the ▲ and ▼ keys on the LCD keypad for approx. 40s.

Information on the control panel firmware version can be also obtained by means of the user functions. In order to do so, open the user menu ([CODE][*]), select the **TESTS** function, and then the **PANEL VERSION** item. The number of program version will be shown on the keypad display.

Description of the keypad program version can be found on the label provided inside the keypad housing on the integrated circuit (printed circuit board).

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