Table upgrade

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Modifications list

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1. Summary guide

The following general guide summarizes the main steps for upgrading the ***OPERA T Table***.
It is recommended that the FE performing the upgrade should verify the availability of all the back up files of the Table.

1) Loading the Software folder in Teleservice modality (cap.2.2).
2) Upgrade the Console software (cap.2.3).
3) Upgrade the Positioner software (cap.2.4).
4) Check the software version and the checksum in TeleService modality (positioner Remote-diagnostics program), for further details look the Teleservice manual.
5) Check the alarms reset in TeleService modality (positioner Remote-diagnostics program), for further details look the Teleservice manual.

1.1. Field supplied tools and measure instruments

Please note these tools and instruments are not supplied together with the product but they are needed on-site:

- Standard FEs' tools (such as adjustable wrench, screwdrivers, etc.).
- Pin-to-pin 25 outlet-parallel cable with male-female end connectors.
- Serial cable (Null Modem type).
- For analogical systems only: a laptop computer for setup and calibrations if required.

1.2. Supplied special components

Special components being supplied together with the product:

- Positioner software update file (So.lo file – version 1.3B).
- Console software update file (Ts.lo file – version 1.3A).

Note:

2. Table software upgrade

2.1. General information

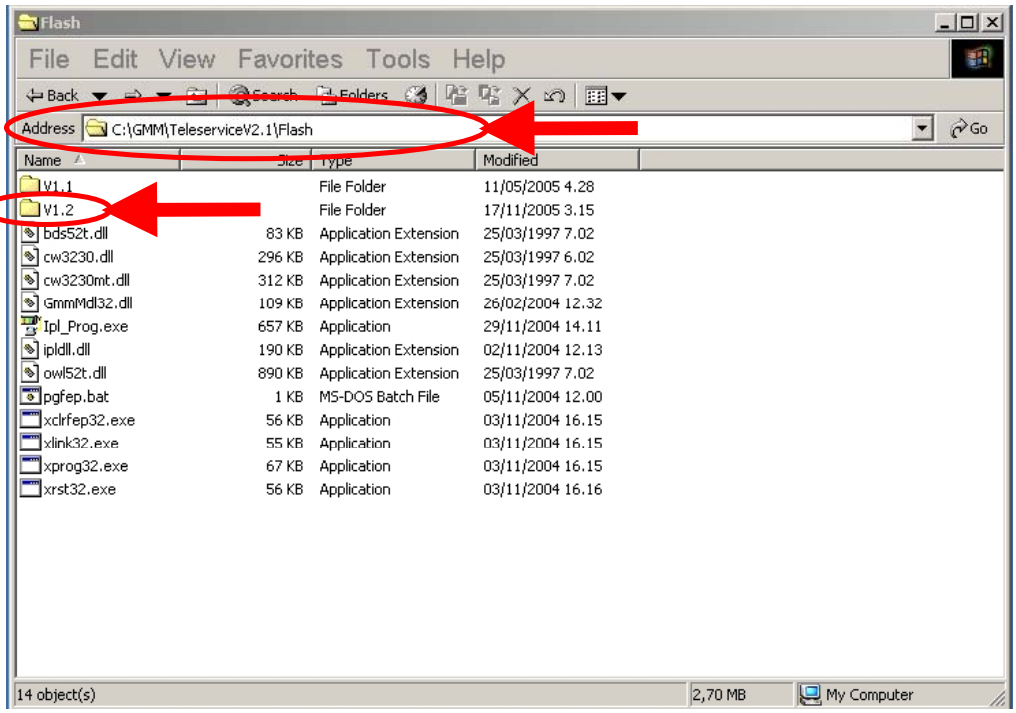
Please note that in order to program both CPU-Console board (1S2 – code 55360) and CPU-Host board (25S1 – code 55973) it is necessary to have the positioner remote-diagnostics program (Opera TeleService) installed on your PC (either the digital system PC or a laptop).

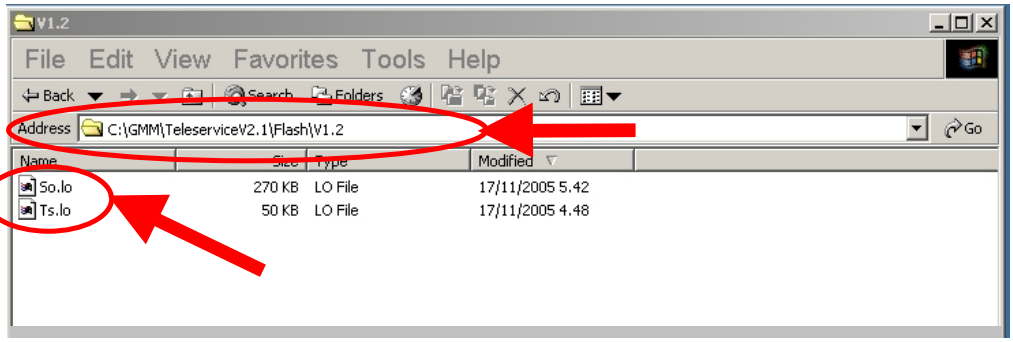
2.2. Loading the software version folder in TeleService modality

The current TeleService version is 2.1. It contains of default the software version 1.3A and 1.3B.

Usually the address is:

- C:\GMM\TeleserviceV2.1\Flash





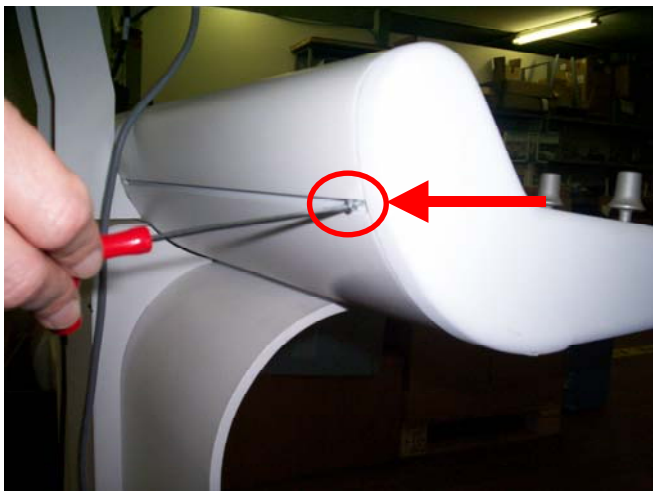
2.3. Programming 1S2 (CPU-console) board

2.3.1. Instructions for programming the CPU-console board flash memory

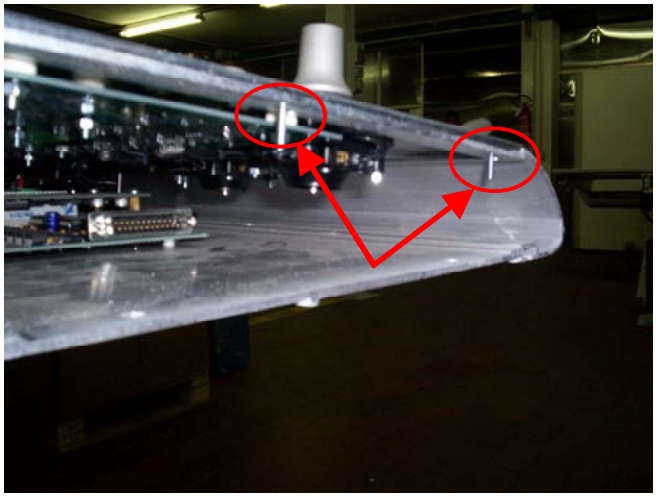
Please make sure to adopt all necessary precautions when handling electronic boards.

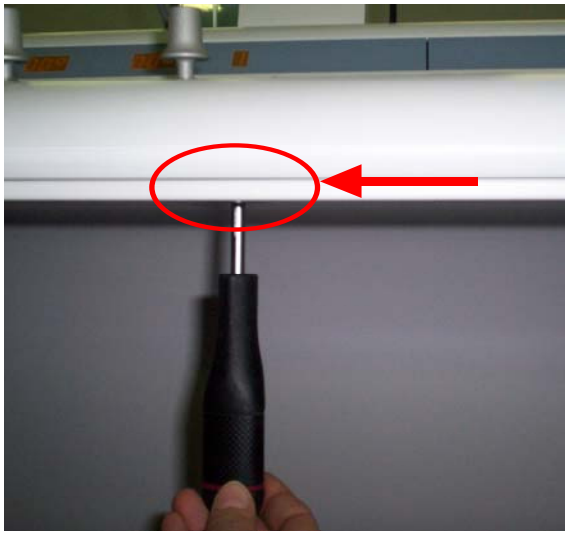
Power off the **Table** and proceed according to the following steps:

- Remove both left and right sides of the console.



- Remove the fixation nuts from the top panel (4 bots on the external sides for single console; 5 bots for integrate console, 4 on the external sides and one in the center.





- Open the console panel.
- Connect the cable (pin-to-pin 25 outlet-parallel cable with male-female end connectors) for parallel ports (code 55394) to 1S2-CN9 connector of the CPU-console board.
- Remove the fiber optic cable.

Digital PC or laptop:
Switch off the PC:

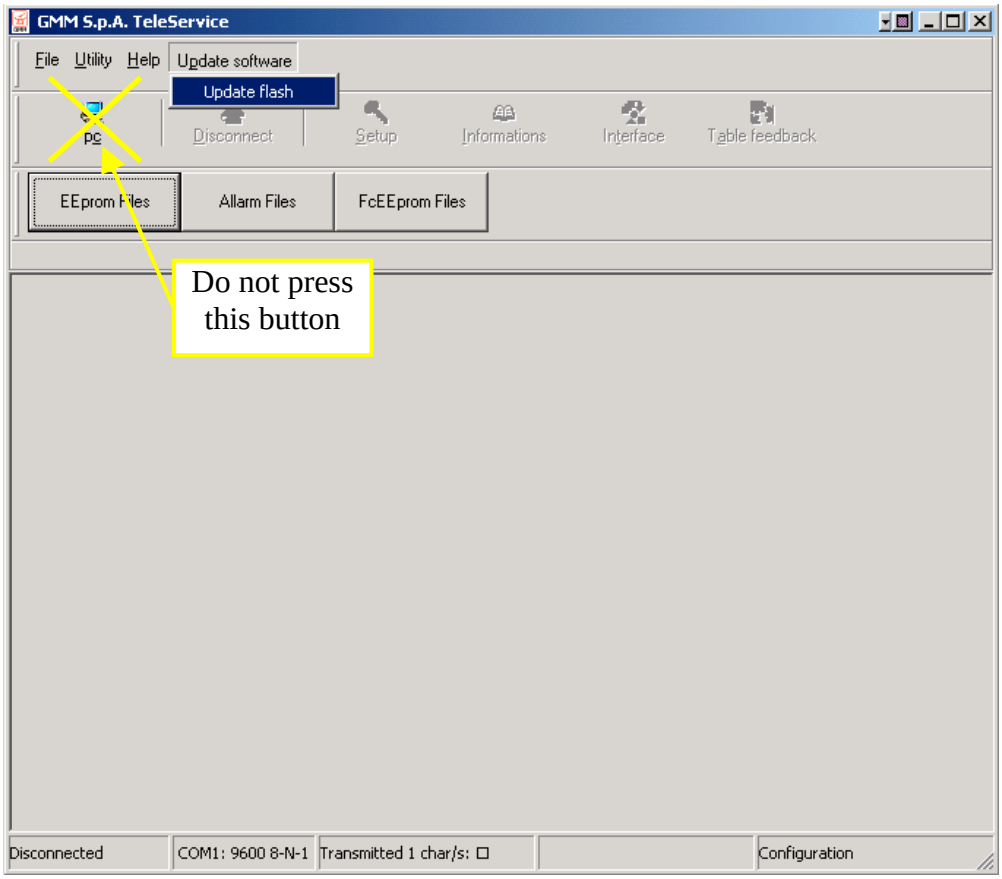
- Connect the cable to the parallel port of the PC (with Infimed digital system it is possible to use the LPT1 printer parallel port, in other cases you shall use the laptop port).
- Turn on the PC and the positioner.

Make sure code 098 is visualized on the alarms/visualizations display.
By means of the positioner remote-diagnostics program (following par. 2.3.2) you shall complete the CPU-Console board programming.

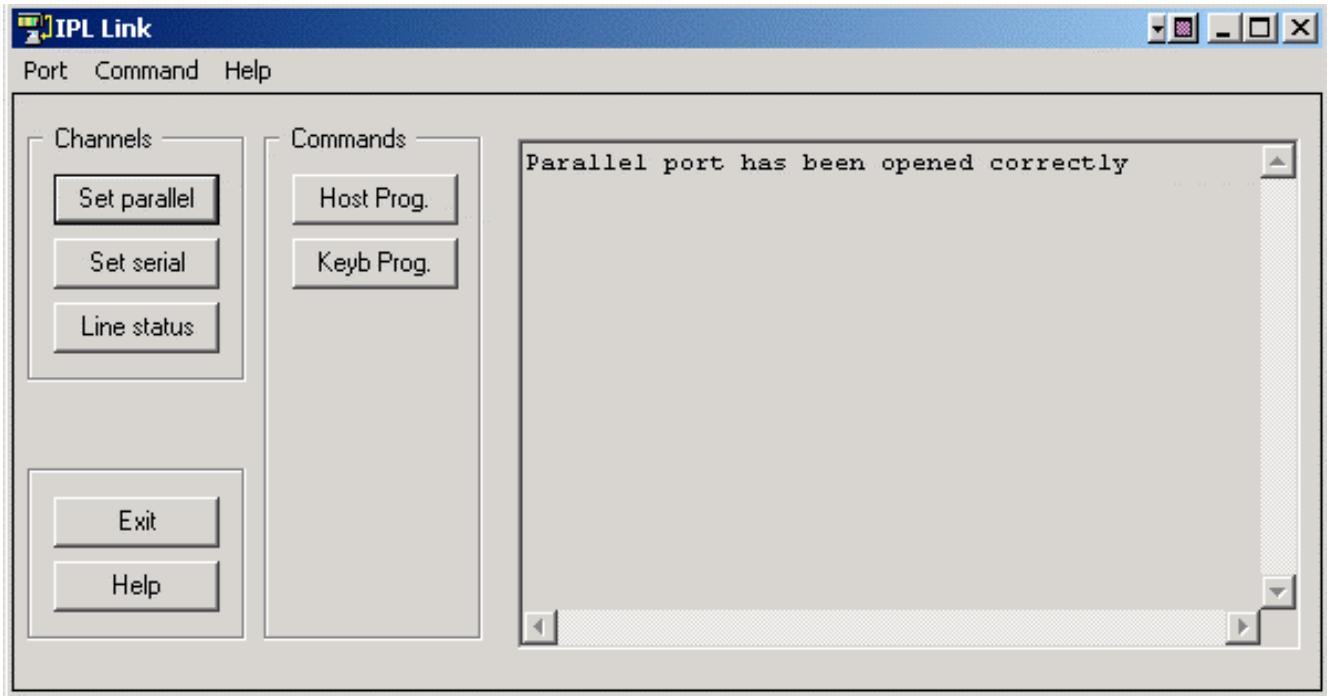
2.3.2. Programming

Do **NOT** enter the positioner remote-diagnostics program (do **NOT** select the "**PC**" or "Modem" icons): should this modality be selected, you shall exit the TeleService by selecting the "**Disconnect**" icon

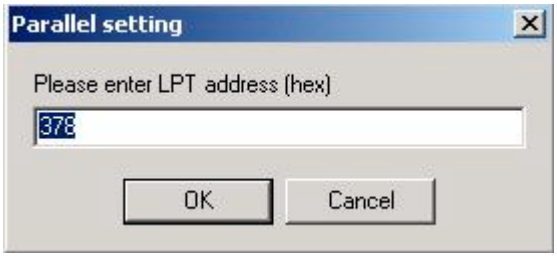
Click on the "**Update software**" tab, select the "**Update flash**" function.


GMM S.p.A. TeleService
File
Utility
Help
Update software
Update flash
PC
Disconnect
Setup
Informations
Interface
Table feedback
EEprom Files
Allarm Files
FcEEprom Files
Do not press this button
Disconnected
COM1: 9600 8-N-1
Transmitted 1 char/s:
Configuration

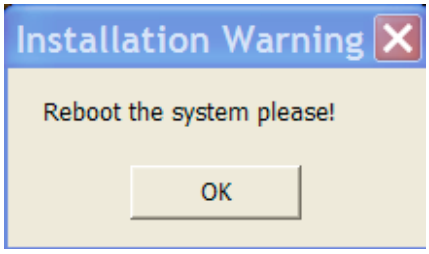
The following window will be displayed:



- You shall select "**Set parallel**".
- You shall delete the existing address **"378"**;
- You shall newly type the LPT address "**378**" and confirm by clicking on the "OK" option;
- You will be prompted the following message: "Parallel port has been opened correctly".



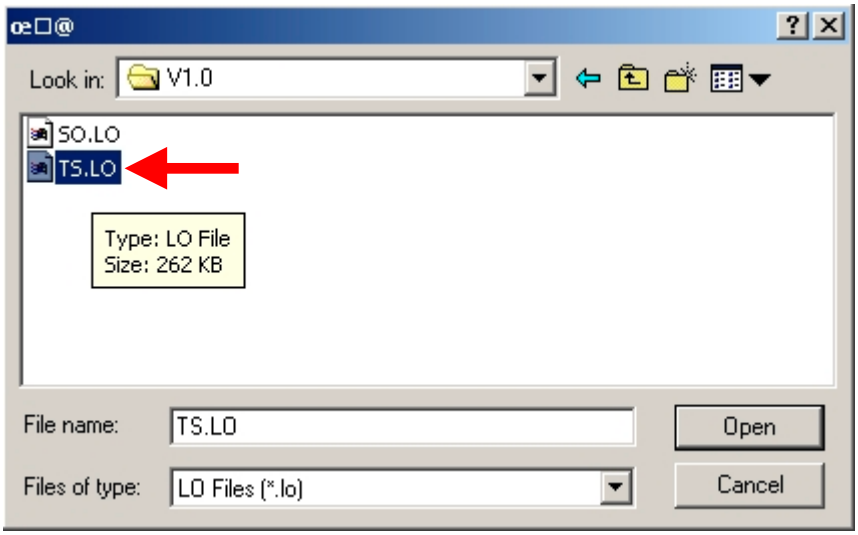
If this is the first time you enter the digital PC (or laptop) programming, the system will automatically set the parallel port and you will be requested to reboot the system:



- You shall press the OK button.

(Note: if the programming procedure was already executed at a previous occasion, you shall start from the following selection):

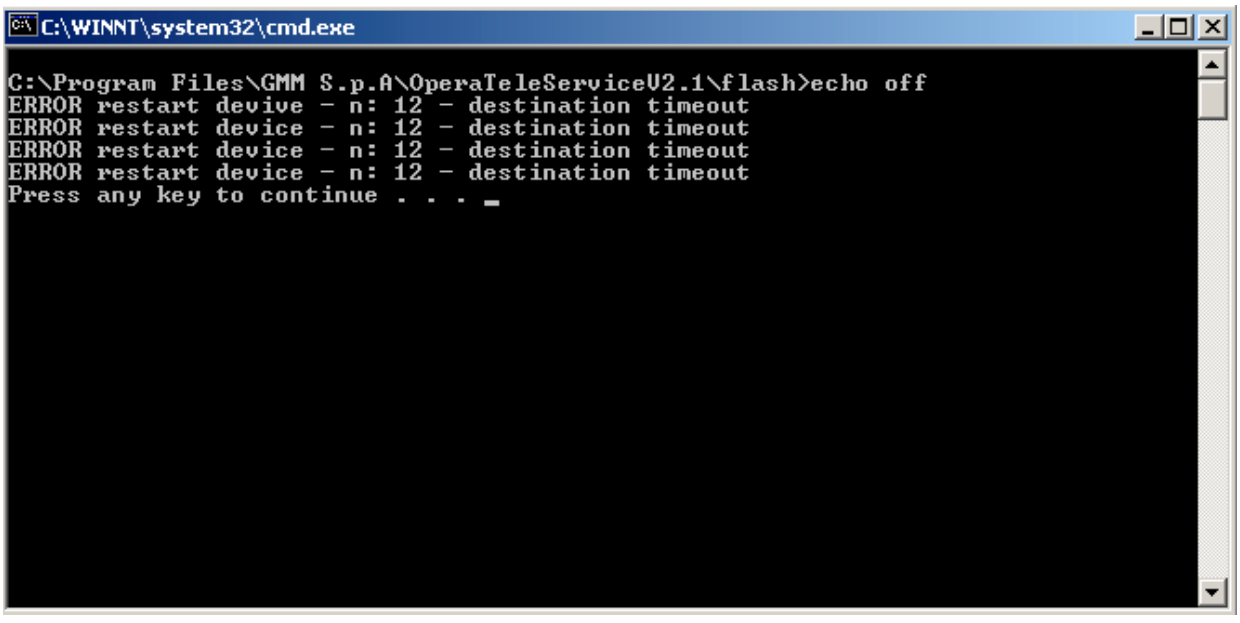
- Select **"Keyb Prog."**under the "Commands" options for programming the console flash.
- Select in "Look in" the software **version** (folder) you want to load (ex.: V1.0).
- Select the "**TS.LO**" file.



- Disconnect 1S2-CN6 connector from the CPU-console board (this will turn off the console) Press the "**Open**" button.
- Re-connect 1S-CN6 connector to the CPU-console board to power on the console.

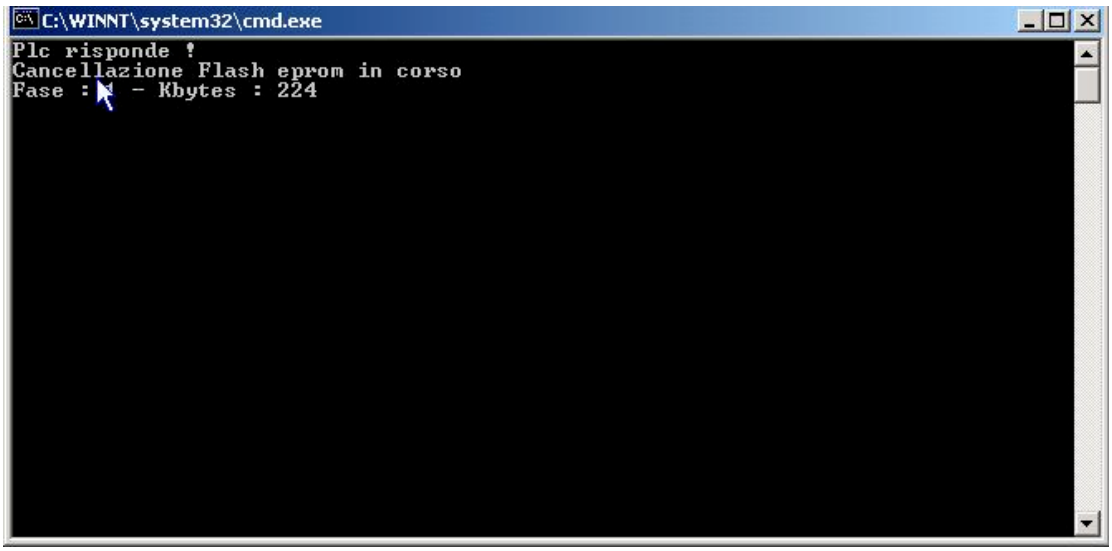
The automatic programming execution mask will be displayed:

If the message "ERROR restart device– n: 12 – destination timeout" appears, you shall press any key to continue and then exit the programming procedure; you shall have to re-check the connection of the parallel cable and repeat the programming procedure from the beginning.

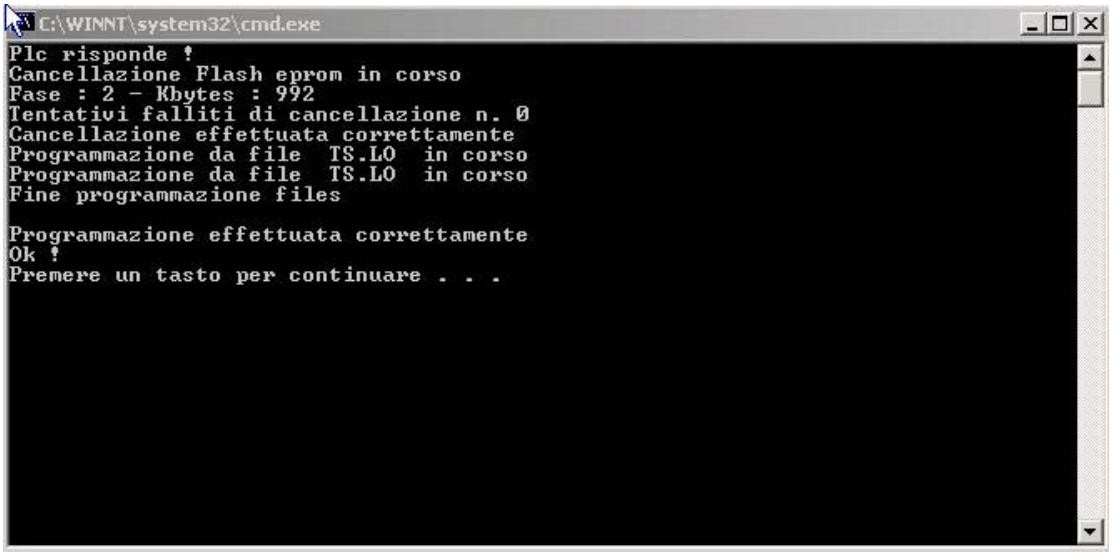


If no error message is displayed, it means everything proceeds correctly and programming of the flash is executed automatically; you will be prompted the following steps:

- Board response OK (“*Plc risponde !*”).
- Erasing the flash in progress (“*Cancellazione Flash eprom in corso*”).



- TS.LO file programming in progress (“*Programmazione da file TS.LO in corso*).
- Files programming is complete (“*Fine programmazione files”*).
- **Programming procedure was executed successfully**: you will know the procedure is complete as soon as this message appears: ***Programmazione effettuata correttamente – OK !***



- At this point you shall press any key to continue and exit the programming window.
- Switch off the system and disconnect the cable from the parallel port.
- Re-connect the fiber optics cable as per its original position.
- Re- assemble the console so as to make sure it is restored as originally provided.

2.4. Programming 25S1 (CPU-Host) board

2.4.1. Instructions for programming CPU-Host board flash memory

Please make sure to adopt all necessary precautions when handling electronic boards.

Switch off the system:

Note:
You can use the 22TR2-F1 fuse for switch on and off the equipment

- Open the power cabinet.
- Open the I/O board support cover (you shall unscrew two fixation nuts).
- Connect the cable code 52640 (Null Modem 9 outlet-crossed cable with female-female end connectors) for serial ports to 25S1-CN18 connector. In case the system is equipped with the Infimed digital system it will be possible to use the cable already available for running the remote-diagnostics program: you shall just move the CPU-Host cable from CN3 connector to CN18 connector. In all other cases do connect to a laptop.
- Remove the fiber optic cable.
- Move 25S1-J2 jumper to 25S1-J1 jumper (J1 must be set to ON and J2 must be set to OFF).

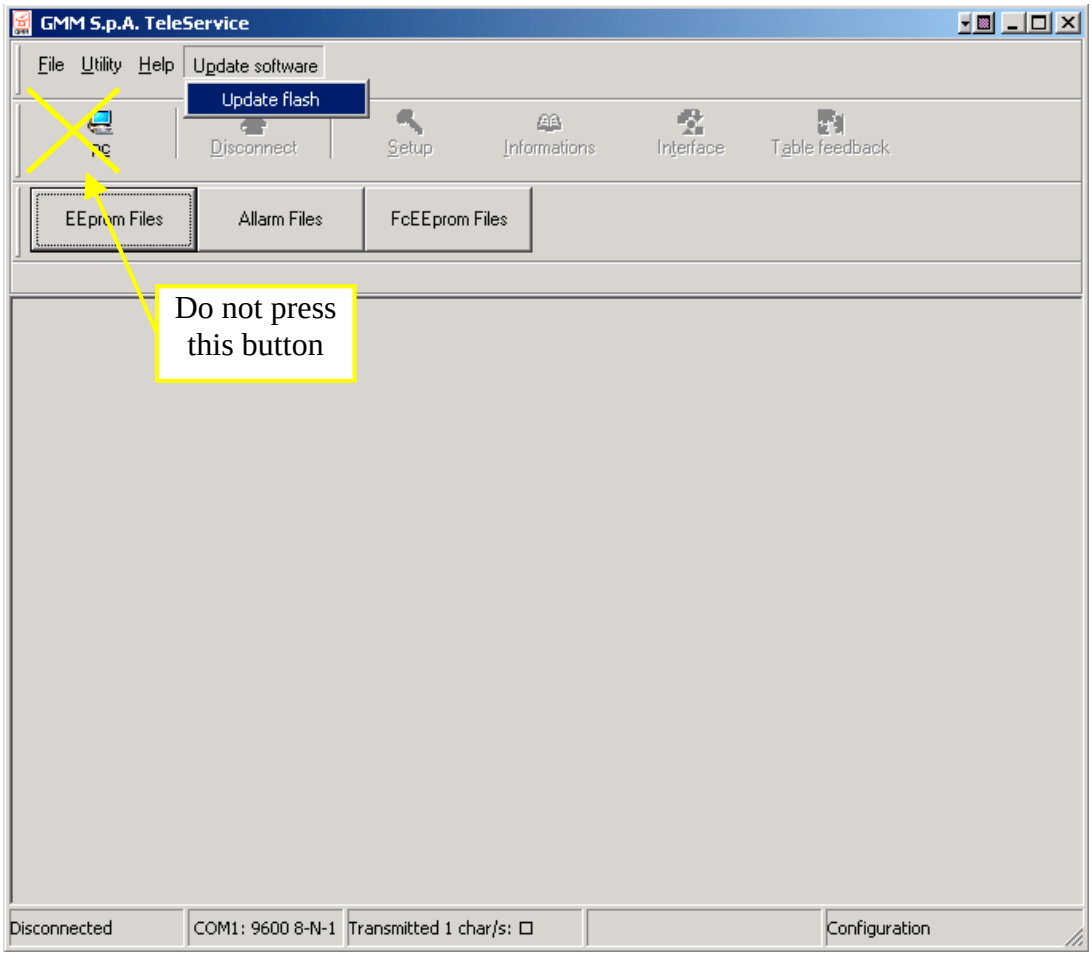
Digital PC or laptop:
- Make sure the PC is switched off and connect the cable to the PC serial port.
- Switch on the PC.

The system remaining switched off, you shall proceed according to the procedure in the following paragraph 2.4.2 and execute the CPU-Host programming.

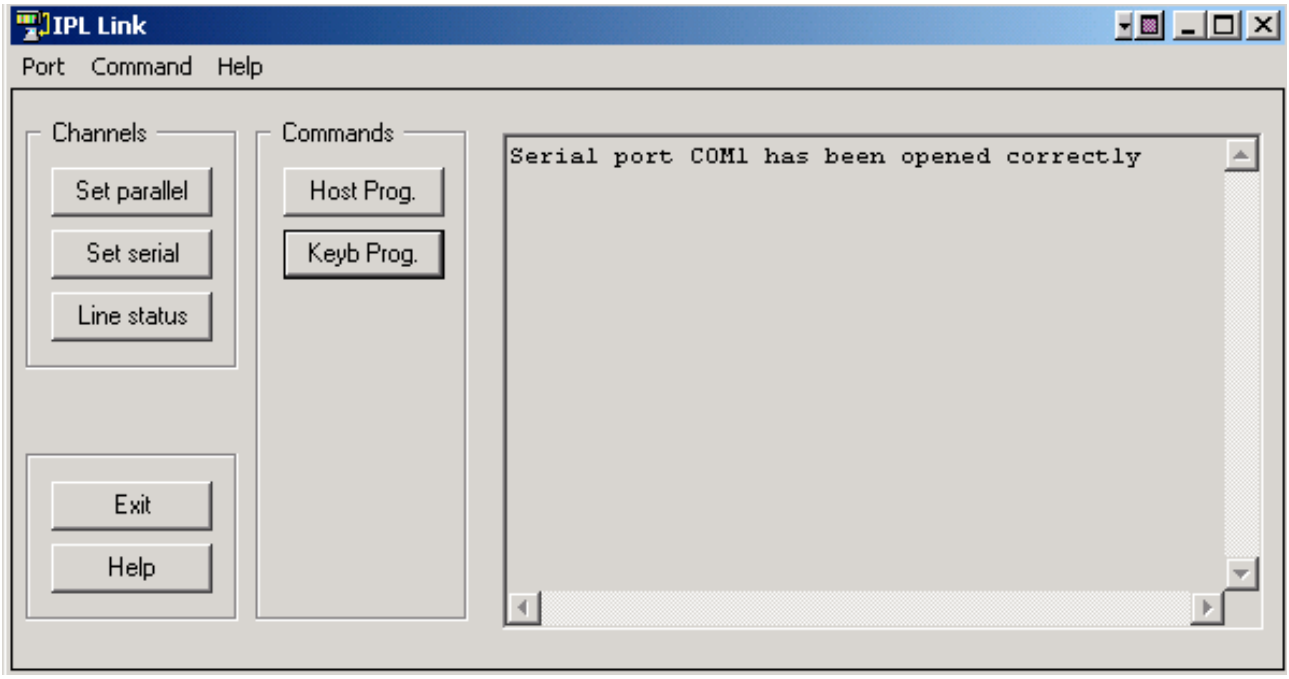
2.4.2. Programming

Do **NOT** enter the positioner remote-diagnostics program (do **NOT** select the "**PC**" or "Modem" icons): should this modality be selected, you shall exit the TeleService by selecting the "**Disconnect**" icon

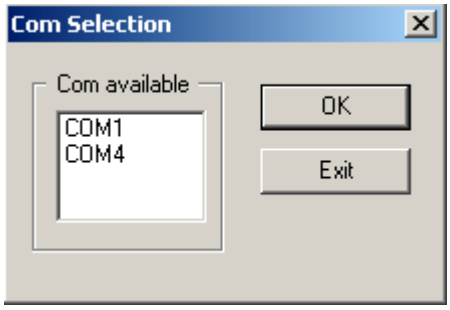
- Click on the "**Update software"** tab and select "**Update flash"** function (see the following picture).



The following window will be displayed:



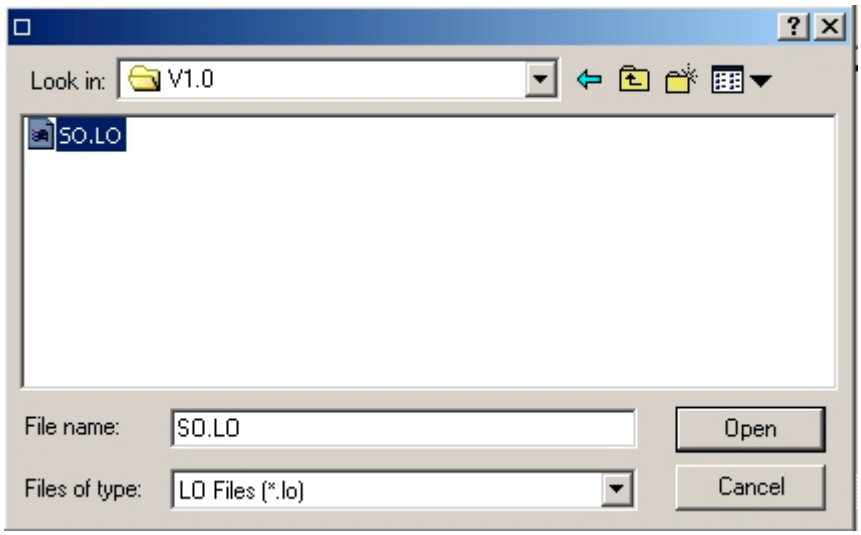
- Select "**Set serial**" and set the PC serial port:



- You shall select the available COM based on the serial port currently used (in case of systems with Infimed digital equipment, you shall select COM5).
- Press "**OK**" to confirm your selection.
- The following message will be displayed: "Serial port COM ___ has been opened correctly"

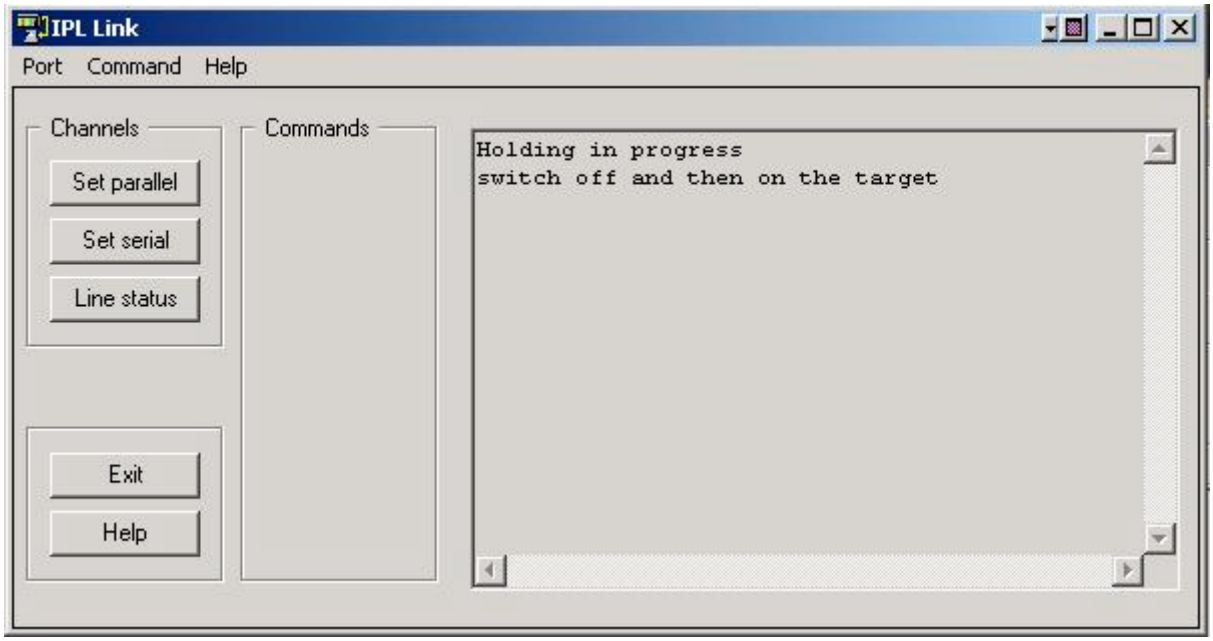
- You shall now select "**Host Prog**." option under "Commands" to start programming.

- Select the software **version** (folder) to be loaded (for example V1.0).
- Select "**SO.LO**" file.

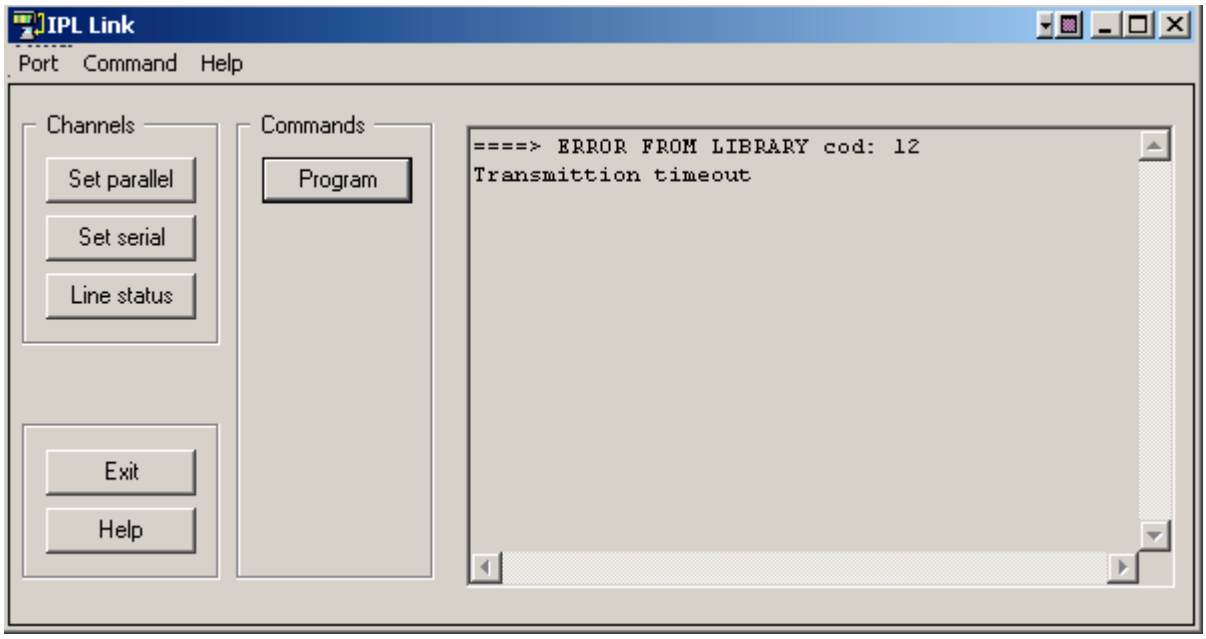


- Press the "**Open**" button.

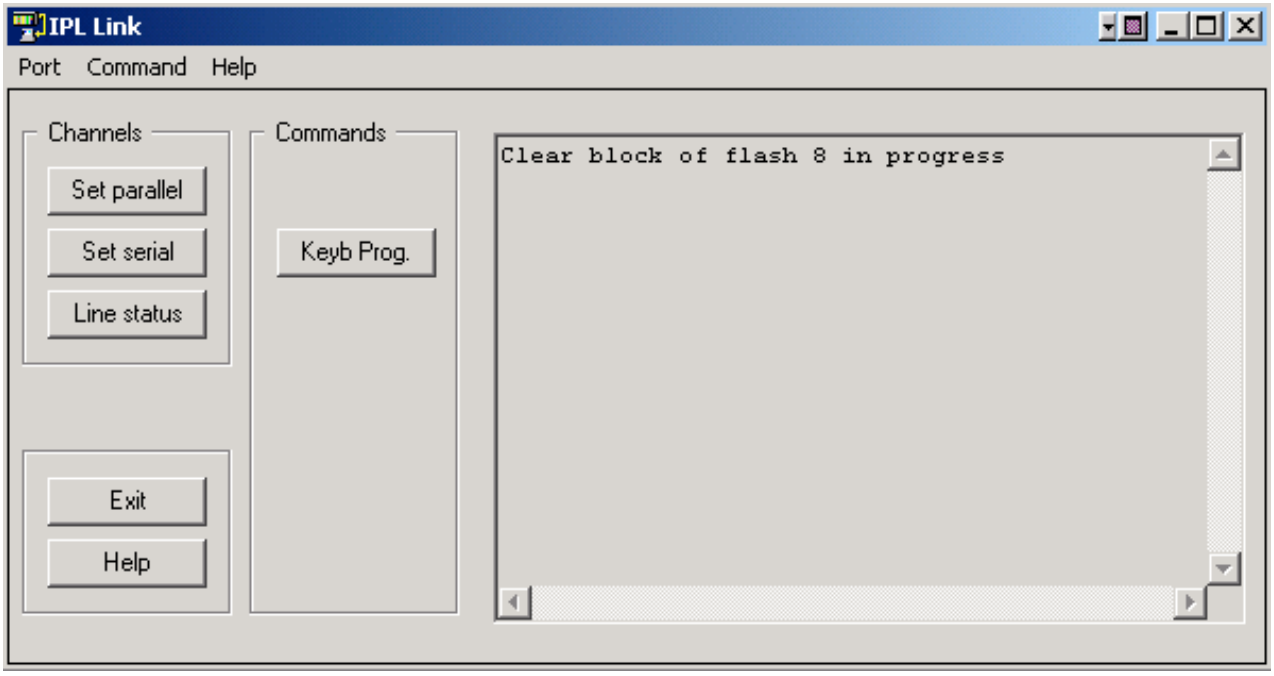
- The following window will be displayed and you shall follow the instructions visualised by the "IPL Link" mask;
- Switch on **quickly** the equipment.



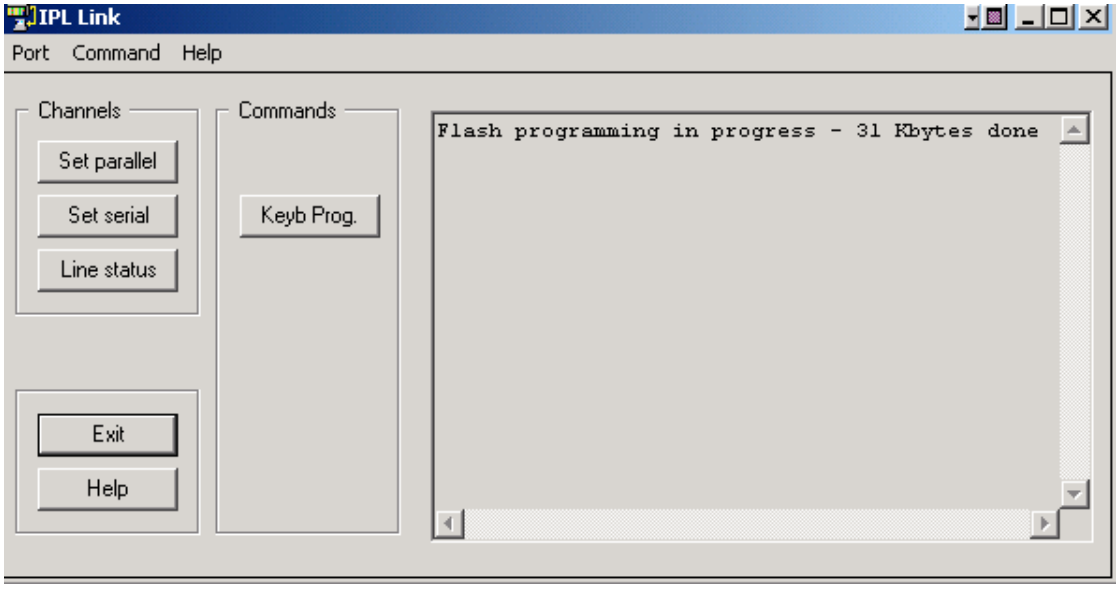
- If the following error message appears, you shall first switch off the equipment then repeat the whole procedure from paragraph 2.4 (select Host Prog, the serial port is already set), re-send the file (select + open SO.LO file) and **quickly** switch on the equipment.



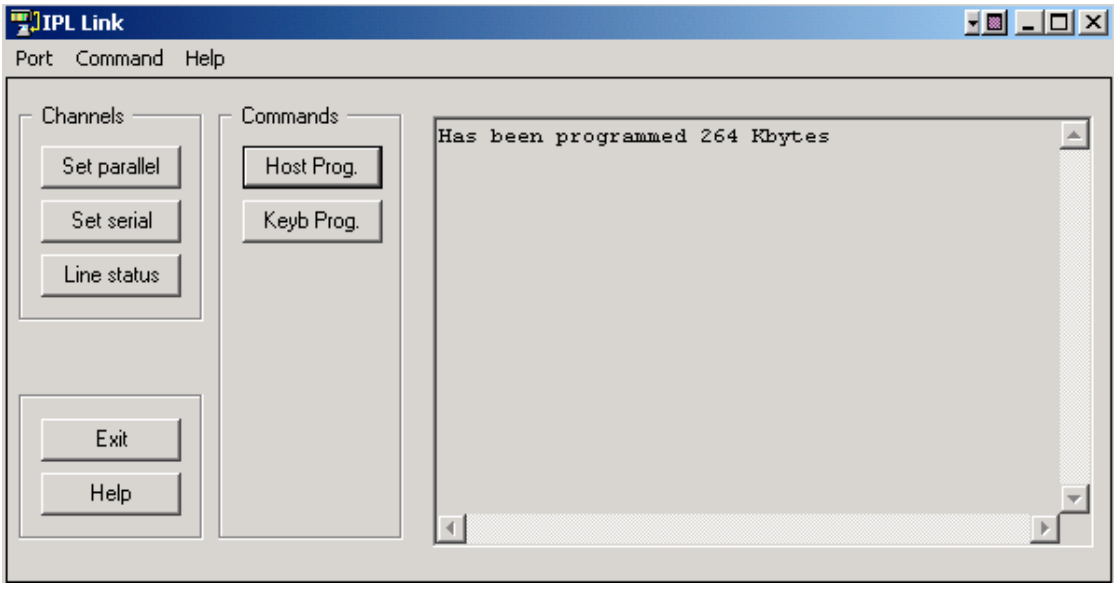
- If programming proceeds correctly, you will be informed that erasing the flash has started:



- The following message will be displayed to confirm the flash programming is in progress:



- As soon as the programming procedure has been successfully completed, the following message will appear "*Has been programmed*"



- You shall now press the "**Exit**" button and switch off the system.

The equipment being switched off:

- Disconnect the cable from the serial port and restore the fiber optic and J2 and J1 jumpers positions.
- If the cable already available for the remote-diagnostics feature has been used, you shall remember to move the CPU-Host cable to the 25S1-CN3 connector.

3. Upgrading software version verification

3.1. From software version V1.1A ÷1.3A to version V1.3B

1. Load the software of the 25S1 (CPU-Host) board (cap.2).
2. Load the software of the 1S2 (CPU-Console) board (cap.2).
3. Check the software version and the checksum in TeleService modality (positioner Remote-diagnostics program).
4. Check the alarms reset in TeleService modality.
5. The software upgrading is now complete and you can use the positioner.