

MODULE DE PROGRAMMATION DE DECODEURS
REF. 2466**Manuel de programmation. V2.04****Information Préliminaire. December, 1999**

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MDS DecoWin User's Manual v2.04

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1. Preface

The MDS DecoWin (DECOWIN from here) program is intended to manage the MDS Decoders from a PC with Windows 3.1x, 95 or 98 software. With this software you can check and program the decoders one by one or the whole installation at once. It can be used with Audio decoders (4, 8 and ISO), Relay decoders and Sensor decoders.

1.1 Basic requirements

In order to use this program you need a PC (486 or better; Pentium recommended), with 8Mb (minimum; 16Mb recommended) RAM, a free **enhanced** serial port (16550 compatible) and a Decoder-PC Interface (*ref. 2466*), which includes a suitable hookup cable. Look at Chapter 4 for specific information about the required PC.

2. Installing and starting the program

Run the 'SETUP' utility located at the root directory of the supplied disk (A:\ or B:\), in order to copy and configure the software in a suitable directory.

This program will ask you for the *Installation Directory* and the *Windows Directory*. We recommend you leave the default in the *Installation Directory*. If Windows is not located in the directory shown, change it to suit your system.

Once you are done with the modifications, press *OK* button. The program will be installed in your PC and will add an application icon for the DECOWIN program in the FERMAX group.

In order to run the program, you'll need to double-click over the DECOWIN icon. As this is the first time you use the program, you should enter the COM port (serial port) to use. Go to '*Setup/Serial Port*' option and select a suitable port, from COM1 to COM4. Next time you run the program, it will be automatically selected, so you won't need to select it again. You need to tell also to the system where the program is located. To do that, you need to select '*Setup/Directory*' and write the directory (C:\FERMAX\MDS\DECO in our sample). This information is also recorded, so you won't need to access to this option again. If you want to use a different directory than the default one, you will need to create the directory and copy there the DECO_TXT.INI file **before** the directory change is made.

3. User's Guide

In order to use the DECOWIN program, you need to connect your computer to the MDS system or to one individual decoder, by means of the Decoder-PC Interface. One side (DB9 plug) is connected to the PC COM port and the other one (mini 4 pin) to the MDS Central or decoder. The connection to the MDS Central is made at CN6 ('TEST DECODER') plug. If you are programming a single decoder, you need to connect the wire to its 'PC' connector.

Set the microswitch nº 2 of the SW1 dipswitches in the Central Unit to OFF position during the programming process. Do not forget to return it to the original position.

Well, now you can start (if not started yet) the DECOWIN program by double clicking over its icon.

3.1 Main screen

The first screen you will see is the main window (Figure-1)

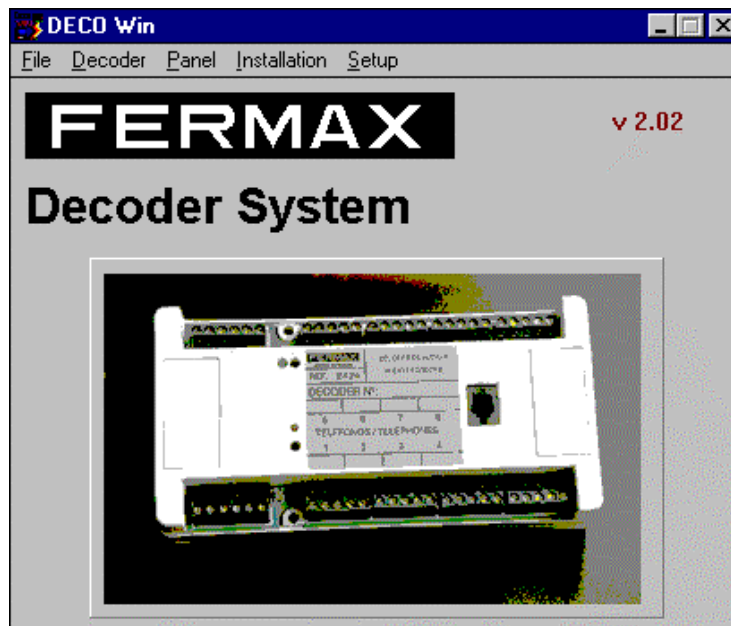


Figure 1: Main window

As you can see, this screen only has a main menu which has the headings for the menus ('File', 'Decoder', 'Panel', 'Installation', 'Setup').

3.1.1. File Menu

This menu is only used to exit the program.

3.1.1.1. File / Exit

With this option you can close the DECOWIN program.

3.1.2. Decoder Menu

This one lets you program and test the decoders.

3.1.2.1. Decoder / Programming

All the decoders, when shipped from factory, have not addresses assigned so you need to program the addresses you want to manage for each decoder output or input. Depending on the kind of decoder, you can control four or eighth telephones (audio decoders) or eight relays or sensors and you need to give each of them a different address. This will be the number you will dial from door panel (in case of audio decoders) or the number used to activate devices (relay decoder) or sensing inputs (sensor decoder).

In order to program the decoders, you can do a 'Single' or 'Auto' programming (this last option is *only used for audio decoders*).

3.1.2.1.1. Decoder / Programming / Single

By 'Single' we mean programming one decoder at a time. To do that, you should connect the decoder ('PC' connector) to the Decoder-PC Interface or to the PC connector into the Central Unit.. Then, select the menu option and you will see something like Figure-2.

Decoder Programming

Decoder

Output	ADDRESS		
	Old	New	
1	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> OK
2	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> OK
3	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> OK
4	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> OK
5	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> OK
6	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> OK
7	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> OK
8	<input type="text"/>	<input type="text"/>	<input type="checkbox"/> OK

Parameters

OK

Close

(1) Connect decoder. Press programming button

Figure 2 : Decoder programming (single)

As you can see at the bottom of the screen, you are asked to press 'Programming button' at the decoder. If you do that, you will get at screen the kind of decoder and the current configuration of the decoder lines, as shown in Figure-3.

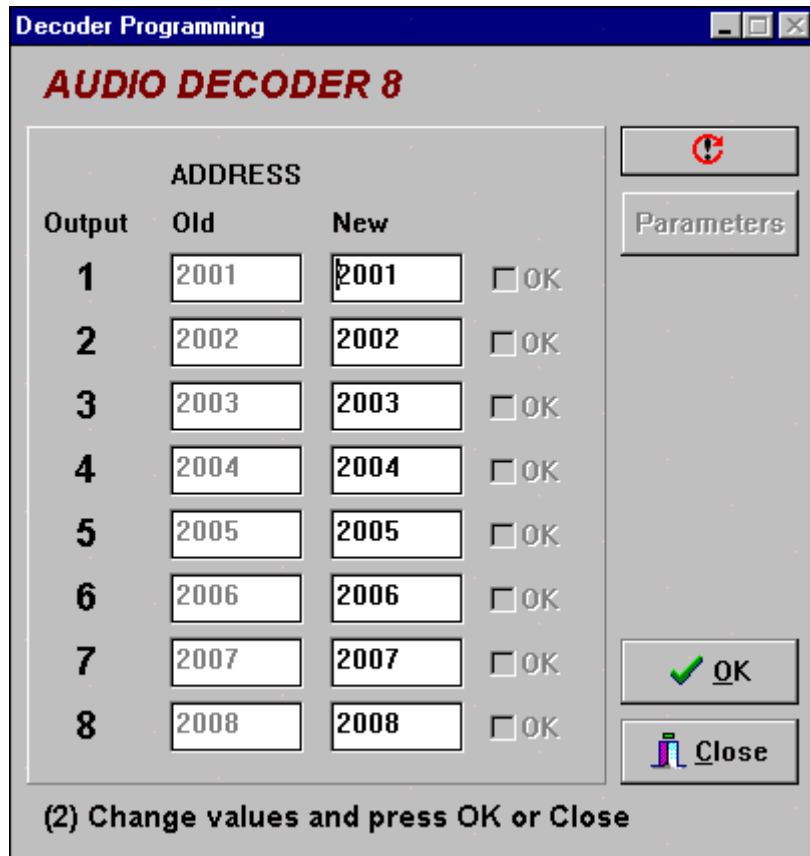


Figure 3 : Programming Audio decoders

In the top, in red, you have the type of decoder. Below you have the current ('old') address, which is the one the decoder has programmed for each output. Then, on the right, you have the 'new' address numbers. By default, you have the current numbers, but you can manually modify them. Range on these addresses depend on the decoder type.

3.1.2.1.1.1. Programming Audio Decoders

In case of AUDIO decoders, the address can be any number from 0000 to 9999. When you are done with the modifications, you can accept them by pressing 'OK' or you can cancel them clicking on 'Close'.

If you want to program another decoder, press over the 'Restart' button



and then continue as previously done.

3.1.2.1.1.2. Programming Relay Decoders

If you are programming a RELAY decoder, you should use addresses B000 to B999. You don't need to manually enter the prefix 'B'. The program will add it for you. Just enter 1, 2 or 3 digits and press 'TAB' to go to the next address (as a sample, entering '12' and pressing 'TAB' will yield to 'B012' address).

As you can see in the following picture, there is an extra button which is enabled when you are programming relays, the 'Parameters' button.

Decoder Programming

RELAY 8

Output	ADDRESS		
	Old	New	
1	B001	B001	<input type="checkbox"/> OK
2	B002	B002	<input type="checkbox"/> OK
3	B003	B003	<input type="checkbox"/> OK
4	B004	B004	<input type="checkbox"/> OK
5	B005	B005	<input type="checkbox"/> OK
6	B006	B006	<input type="checkbox"/> OK
7	B007	B007	<input type="checkbox"/> OK
8	B008	B008	<input type="checkbox"/> OK

(2) Change values and press OK or Close

Figure 4: Programming Relay decoders

This option is enabled because you need to program some special operating parameters of the relays. Clicking over that button you will get the following window:



Decoder parameters

Output	Address	Time	Init / (m)
1	B001	1	<input checked="" type="checkbox"/>
2	B002	2	<input checked="" type="checkbox"/>
3	B003	3	<input checked="" type="checkbox"/>
4	B004	4	<input checked="" type="checkbox"/>
5	B005	5	<input checked="" type="checkbox"/>
6	B006	6	<input checked="" type="checkbox"/>
7	B007	7	<input checked="" type="checkbox"/>
8	B008	8	<input checked="" type="checkbox"/>


Figure 5: Relay parameters

As you can see, the outputs and addresses are shown just for information and then you can program the 'Time' and 'Init' condition for each relay. 'Time' is a value from 0 to 255. If we select '0', the relay, once activated, will remain active until a de-activation is sent from the Central. Any other value, from '1' to '255' will be the time in seconds the relay will stay energized once activated.

If 'Init' is selected, when the decoder is first powered, it will have that relay activated for the specified time or until a de-activation command is received if 'Time' is '0'.

You can also press over the COPY button  if you want to configure all relays with same configuration as the first one. If you want to clear the table to default values ('Time' 0 and 'Init' disabled), press over the CLEAR button .

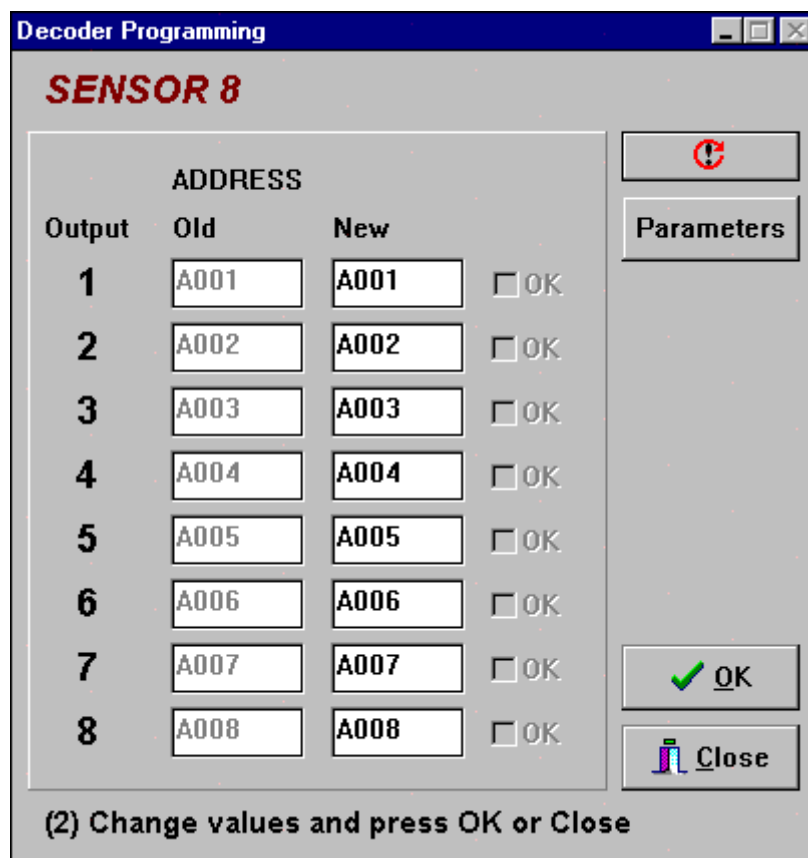
Once you have finished with the modifications, press the 'OK' button to exit that window, and you will return to the decoder address programming window. When you are done with the address and parameters modifications, you can accept them by pressing 'OK' or you can cancel them clicking on 'Close'.

If you want to program another decoder, click on the 'Restart' button  and then continue as in previous paragraphs.

3.1.2.1.1.3. Programming Sensor Decoders

If you are programming a SENSOR decoder, you should use addresses A000 to A999. You don't need to manually enter the prefix 'A'. The program will add it for you. Just enter 1, 2 or 3 digits and press 'TAB' to go to the next address (as a sample, entering '34' and pressing 'TAB' will yield to 'A034' address).

As in the case of RELAY decoders there is an extra button which is enabled when you are programming sensors, the 'Parameters' button.



Output	Old ADDRESS	New ADDRESS	OK
1	A001	A001	<input type="checkbox"/>
2	A002	A002	<input type="checkbox"/>
3	A003	A003	<input type="checkbox"/>
4	A004	A004	<input type="checkbox"/>
5	A005	A005	<input type="checkbox"/>
6	A006	A006	<input type="checkbox"/>
7	A007	A007	<input type="checkbox"/>
8	A008	A008	<input type="checkbox"/>

(2) Change values and press OK or Close

Figure 6: Programming Sensor decoders



This option is enabled because you need to program some special operating parameters of the sensors. Clicking over that button you will get the following window:

Output	Address	Time	Init / (m)
1	A001	1	<input type="checkbox"/>
2	A002	2	<input type="checkbox"/>
3	A003	3	<input type="checkbox"/>
4	A004	4	<input type="checkbox"/>
5	A005	1	<input checked="" type="checkbox"/>
6	A006	2	<input checked="" type="checkbox"/>
7	A007	3	<input checked="" type="checkbox"/>
8	A008	4	<input checked="" type="checkbox"/>


At the bottom, there are icons for COPY (document with arrows) and CLEAR (eraser), and an OK button with a green checkmark.

Figure 7: Sensor parameters

On this screen, the outputs and addresses are shown just for information. You can program the 'Time' and '(m)' (time unit) for each sensor. 'Time' is a value from 0 to 127. Selecting '0', the sensor will be programmed as instant activation. Any other value, from '1' to '127' will be the time in seconds or in minutes (if parameter '(m)' is checked) the sensor needs to detect an activation.

You can also click on the COPY button  if you want to configure all sensors with same configuration as the first one. If you want to clear the table to default values ('Time' 0 and '(m)' unchecked), press over the CLEAR button .

Once you have finished with the modifications, press the 'OK' button to exit that window, and you will return to the decoder address programming window. When you are done with the address and parameters modifications, you can accept them by pressing 'OK' or you can cancel them clicking on 'Close'.

If you want to program another decoder, press over the 'Restart' button  and then follow the outlined procedure.

3.1.2.1.2. Decoder / Programming / Auto

This option lets you to automate the decoder programming process. *It is only used with AUDIO decoders.* The way this option works is as follows; you enter the first telephone number you want to program, as shown in Figure-8. As you can see, it is possible to select an 'Unattended mode'. Let's see first the 'attended' mode. If you press 'OK' button, you'll get an screen like Figure-2 (single programming mode), but in this case, when you press programming button in any installation decoder, you'll get automatically the correct number

sequence. If, as an example, we placed as first number the 100, we will get what is shown in Figure-9. Now, in order to program the decoder with this phone numbers, you should press 'OK' or 'CLOSE' if you want to cancel the operation. If you need to program another decoder you will need to press its programming button and, if information is right, press 'OK'.



Figure 8: Auto Programming

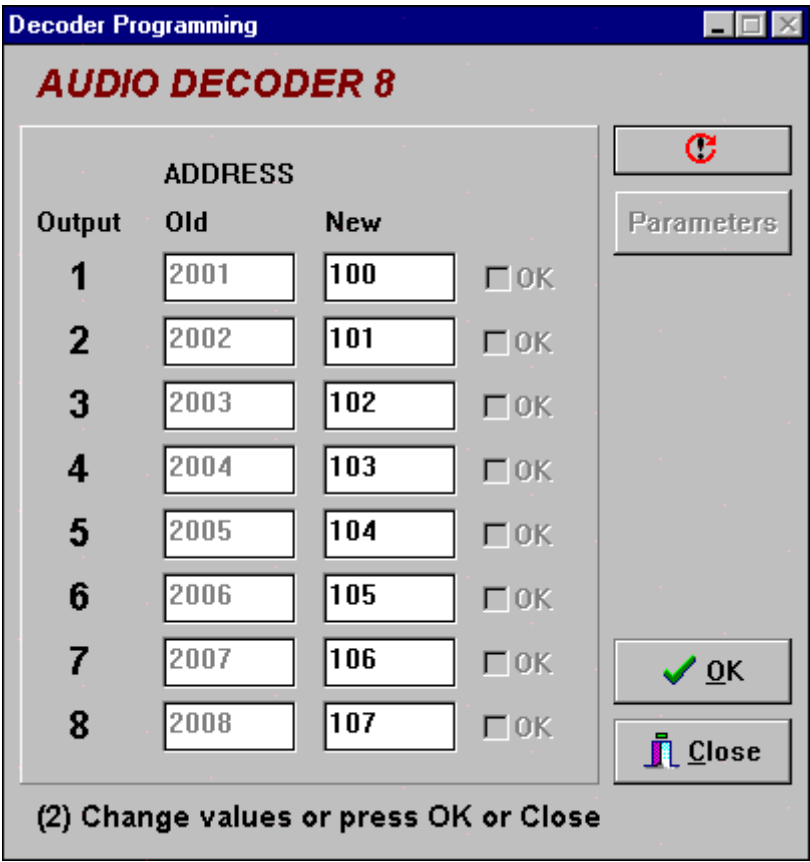


Figure 9: Auto Programming

In the 'Unattended mode' you don't need to be at the computer; you can go to the installation and, every time you press a programming button, you will get the

decoder programmed automatically, as if you press 'OK' button in attended mode. This way, one person can program an installation. In order to know if the programming was successful, the status led of the decoder should return to operating state in short time (about 10 seconds) after programming button was pressed.

NOTE: In addition, every decoder programming always generates a report file: "DPyymmdd.REP", in which yy: year, mm: month and dd: day, with the summary of all of them.

3.1.2.2. Decoder / Test

This option is used to check the AUDIO decoders one by one. In order to do that you use the 'Decoder Test' window, which is shown in Figure-10. You can select any phone number to check and then test (depending on decoder type) calling to it from guard or panel, changing the mode to day or night, calling to the guard unit, audio activation, hooked state, panic button, X-line state. In order to check a phone, you should first change the phone number to the one desired. Then, press the 'RESET' button to start the test. The lamp bulb icon near 'TEST ENABLED' will light, showing you that the test is ready. At the beginning, the phone is put in NIGHT mode, panic button OFF and line-X OFF.

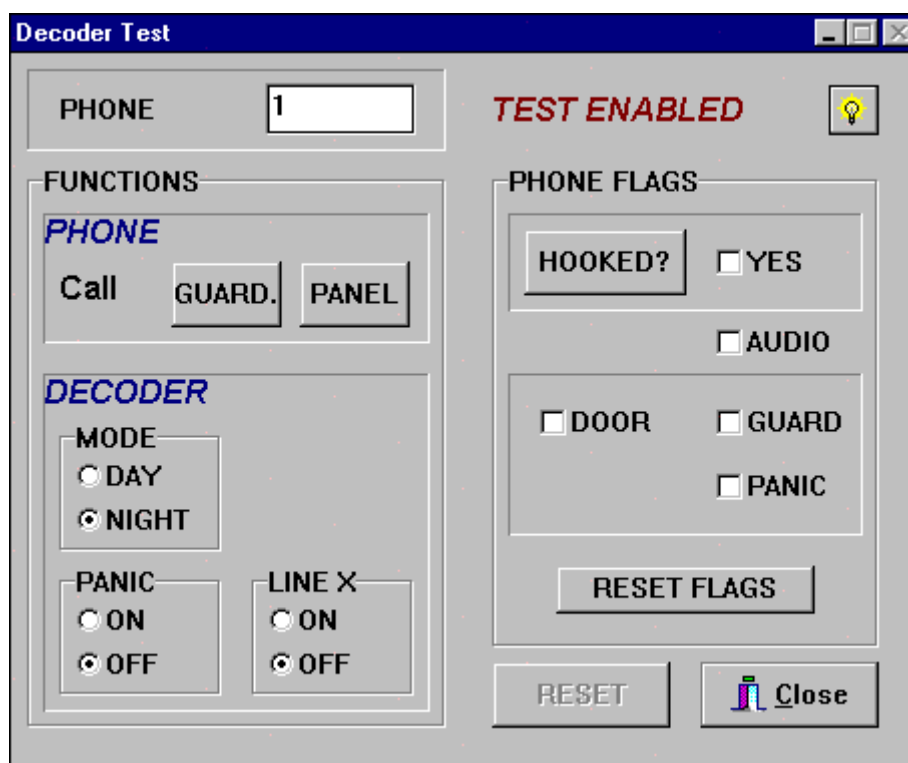


Figure 10: Decoder Test

To check the calling to phone, press the GUARD or PANEL key on the 'PHONE' section. If you want to change the mode of operation, in order to check guard calling or panic button, you can do it by selecting the corresponding radio-buttons under the 'DECODER' title. To check if a hooked or unhooked phone is correctly detected, press 'HOOKED?' button. When you call to a phone, audio will be activated, so 'AUDIO' checkbox is checked. If the calling comes from the panel, you can press the open door button at phone to open the door. It will be shown in the 'DOOR' checkbox. If you put the phone in DAY mode, you can

check also the calling to guard function. If all is right, when you press the open door button, you will get the 'GUARD' checkbox checked. If you are testing an ISODECODER, you can check also PANIC function by selecting it and then pressing the panic button at the phone. If you want to clear the status of the screen, you can press 'RESET FLAGS'.

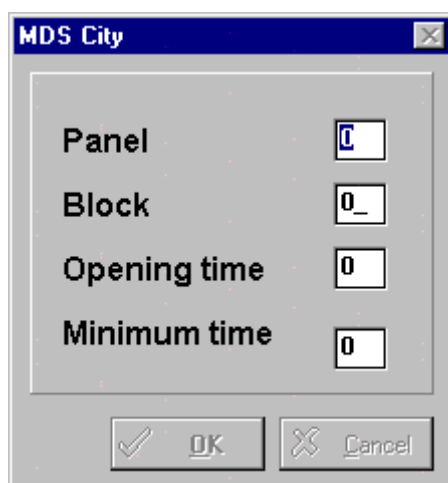
When you are done with the phone checking, press 'CLOSE' to return to main screen.

3.1.3. Panel Menu

With this menu you can program an MDS-City panel.

3.1.3.1. Panel / MDS City

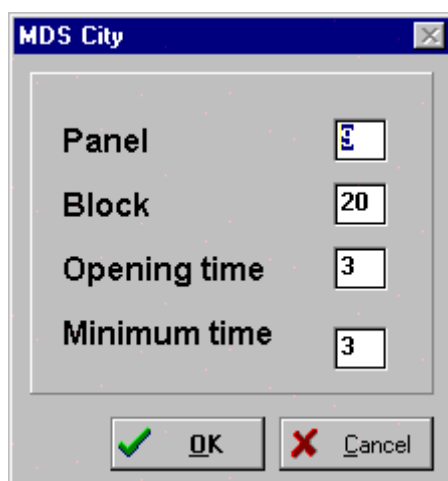
This option lets you program an MDS-City panel connected to the system. When you select this option, you will get a window like the one shown in Figure-11.



The image shows a software window titled "MDS City" with a standard Windows-style title bar (blue background, close button). The window contains four labeled input fields: "Panel" with a text box containing the letter "C", "Block" with a text box containing "0_", "Opening time" with a text box containing "0", and "Minimum time" with a text box containing "0". At the bottom of the window, there are two buttons: "OK" with a green checkmark icon and "Cancel" with a red X icon.

Figure 11: MDS City programming

Then, you should press the 'P' (programming) button in the MDS-City panel. You will get the information programmed in the panel, as is shown in Figure-12.



The image shows the same "MDS City" software window, but with different values entered in the input fields: "Panel" contains "E", "Block" contains "20", "Opening time" contains "3", and "Minimum time" contains "3". The "OK" button now features a green checkmark icon, while the "Cancel" button remains with a red X icon.

Figure 12: MDS City programming

If you want to change any of the MDS City panel parameters, do it and then press 'OK' to validate the changes. Press 'Cancel' if you don't want to change anything.

3.1.4. Installation Menu

This one is useful to check the AUDIO decoders installation once completed. Of course, with the former options (Decoder check) you can check also the phones one by one. But it is faster to check with this.

3.1.4.1. Installation / Devices

If you want to see which AUDIO decoders you have in the system (or, in other words, which phones you have configured), you can use that option. You will be shown something like Figure-13.

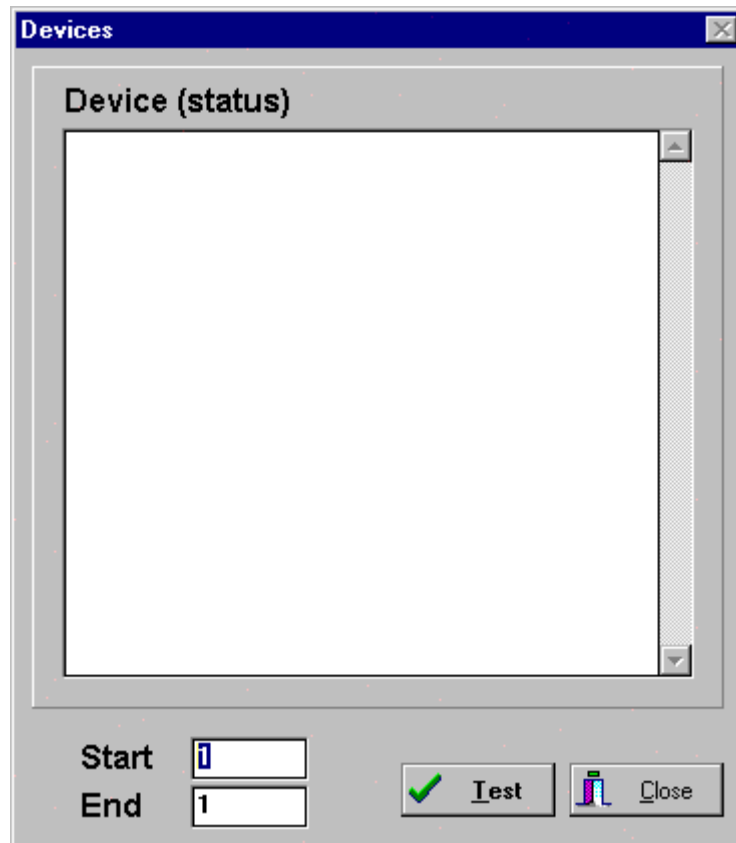


Figure 13: Device list

Then, you should select the *start* and *end* devices to check. As when there is no device in an specific number, the system repeats some times the search, it is a good idea to keep the range as adjusted as possible. If you press 'TEST', you will get a list with the following information: telephone number, kind of decoder and status (hooked or unhooked). You can see an example in Figure-14.

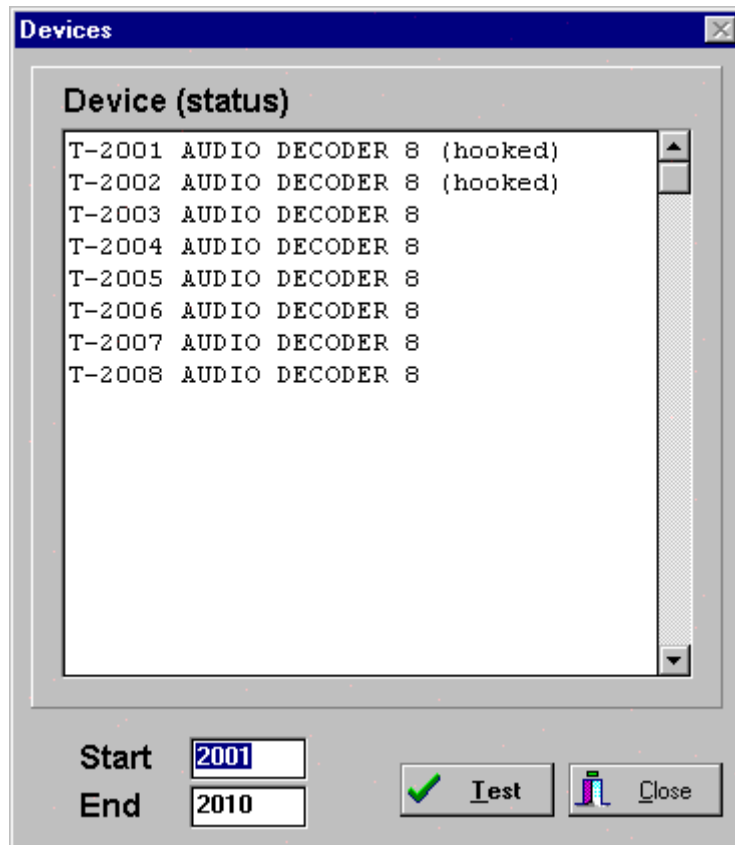


Figure 14: Device List sample

NOTE: The program creates a file in the disk, "IDDPyymmdd.REP", in which yy: year, mm: month and dd: day, containing every information.

3.1.4.2. Installation / Test

This option lets you check the installation without being at the PC. An example of test window is shown in Figure-15.

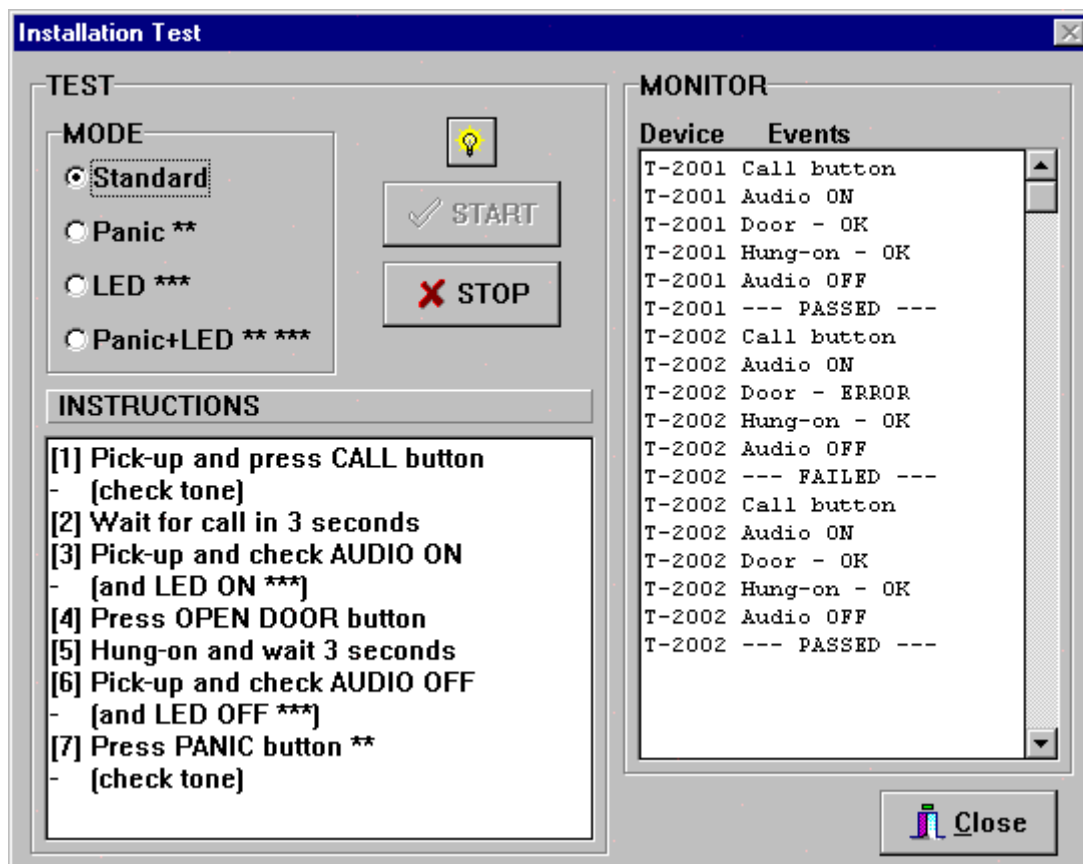


Figure 16: Installation Test sample

3.1.5. Setup Menu

This menu lets us to set up the operating parameters of the application: serial port (COM), data directory and language.

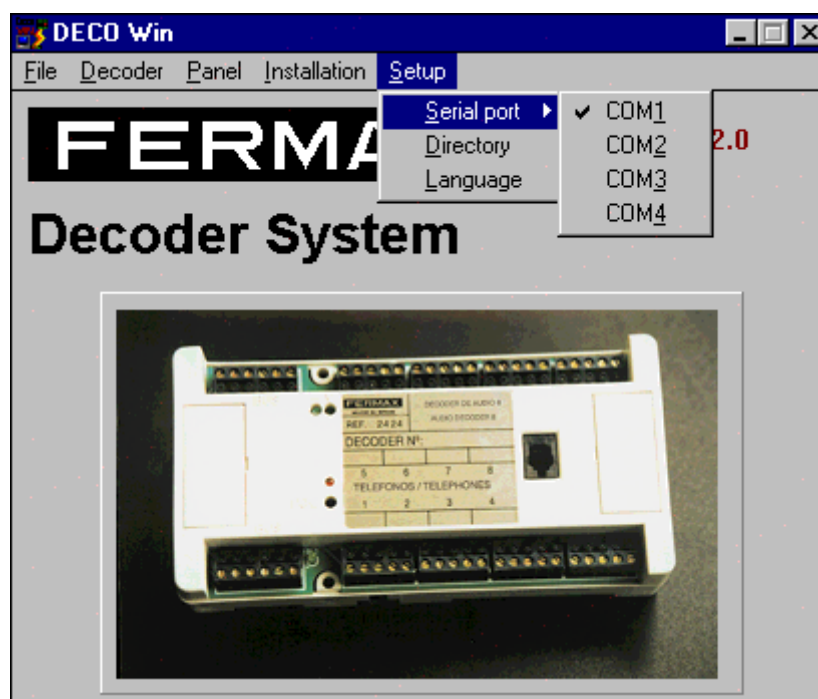


Figure 17: Serial Port selection

3.1.5.1. Setup / Serial Port

With this option you can select which COM port to use to communicate with the MDS system or decoders; you can select from COM1 to COM4. The selected port is shown when you access this option (Figure-17), and it is saved in the DECO.INI file for later use.

3.1.5.2. Setup / Directory

This option lets you change the directory used by the program to read and store data files. Usually, it is the same directory on which the program resides. You can see an example in Figure-18. The selected directory is stored in the DECO.INI file for later use.

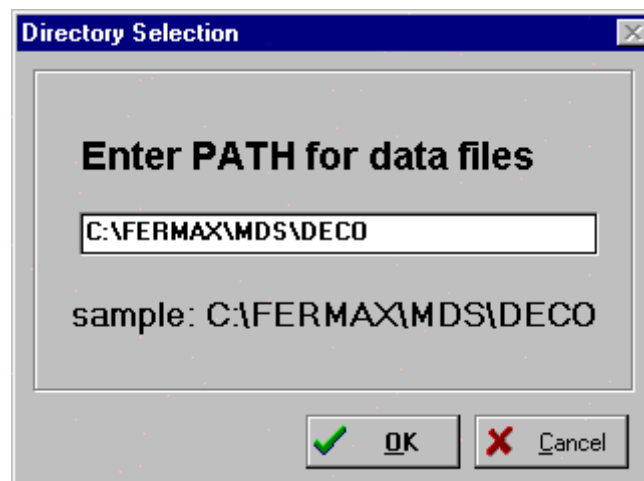


Figure 18: Directory Selection example

3.1.5.3. Setup / Language

This option lets you modify the language you are using in the program. As it is shipped from FERMAX, it contains the spanish and english languages, but the user can add new ones to suit his needs. All language information is included in the DECO_TXT.INI file, which is in the program directory. To add a new language, copy the [ENGLISH] section and rename it (as an example, [FRENCH]). Then translate all the texts to the desired language. Save the file and enter the program again. Go to this option and write the name you gave to the new language ('FRENCH' in our example, look at Figure-19). Automatically, all the texts will change to the ones you added.



Figure 19: Language Selection sample

4. Program requirements

In order to use this program, the following configuration is needed:

- 486DX2/66 or better microprocessor (Pentium recommended).
- 8Mb or more RAM memory (16Mb recommended).
- 3 1/2" high density floppy disk drive.
- Windows 3.1 . Windows 95/98 recommended.
- Mouse or similar pointing device.
- One free ENHANCED (16550 compatible) Serial Port.
- About 2 Mb of free hard disk space.