

# User Manual for Comm50

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Terminal SL-50



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# 1. Introduction

The Comm50 program is a tool for:

- communication between a PC and the SL-50 access controller
- editing of the access table of the SL-50 as well as recording events in an ASCII file.

The events that can be recorded are:

- the registration of an iButton being read,
- activation and deactivation of the access control relay,
- opening the door,
- activation of the alarm relay etc.

The following text will serve to illustrate editing of the access table.

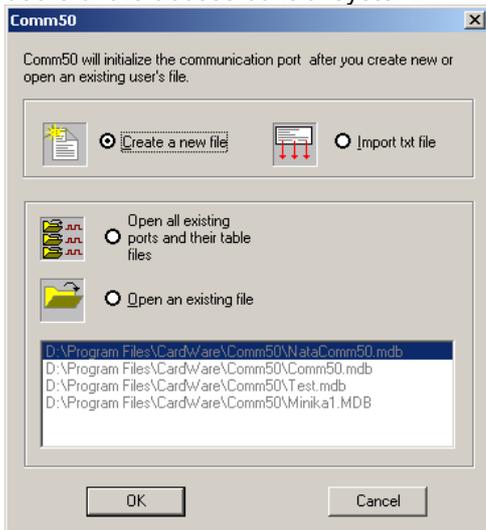
# 2. Installation

To install and use the Comm50 program you must have Win95/98/2000 or NT running on your PC.

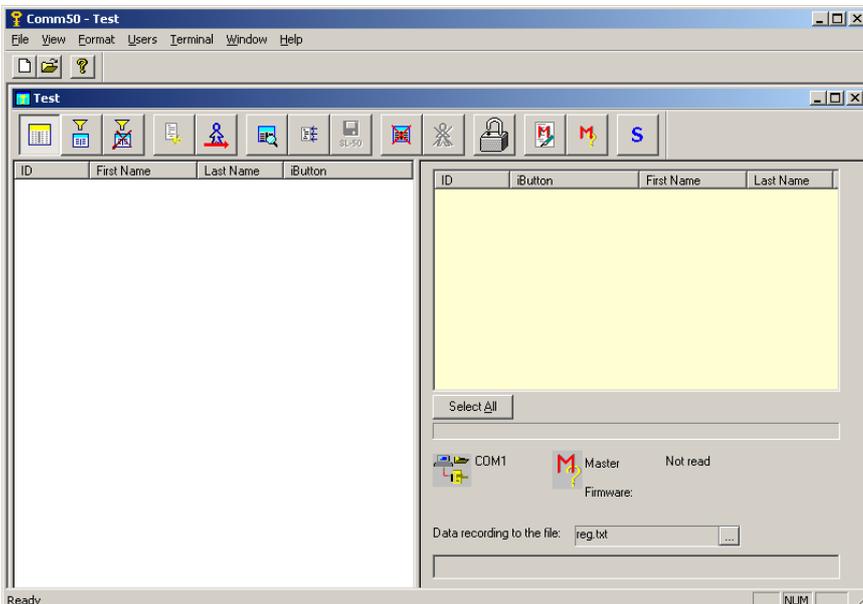
Run the Setup.exe program from the installation disk. After installation Comm50 will be installed in the following directory: c:\Program Files\CardWare\Comm50\Comm50.exe.

# 3. How to begin?

When you first start Comm50 after the installation you will have to create a new file containing data about the users of the access control system.



Use the command: Create a new file



The right side of the screen shows details pertaining to the SL-50 terminal. Communication with the SL-50 is initiated as soon as we activate data recording by entering a text file name into the "Data recording to the file" field. If, for some reason, there is an error with the communication, the component in the terminal part of screen *COMn*, where n is the port number, will appear as in fig. 2.1.

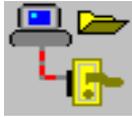
Fig. (2.1)



If the *Communication* icon looks like this, it means that Comm50 has not found a free asynchronous (COM) port to set up communication with the terminal.

If a free port has been found the icon look like the one in fig. 2.2.

Fig. (2.2)



It should be noted that this does not mean that the SL-50 is connected properly, merely that a free port has been found. If your PC has more than one free port you have to check whether you plugged the SL-50 into the right one (i.e. the one Comm50 chose).

During the creation of a new file and terminal window the access table of the terminal is automatically downloaded. If this is the first time you're using the program and the terminal, this table should be empty. If, however, there were iButton codes in the terminal's table, they will now appear in the list on the right side of the screen.

As the file has been created, the user data now has to be entered. This will be visible in the left side of the screen.

**Adding a new user** is done by the *Users -Add user* (or with a click of the mouse on the appropriate button on Toolbar-2. More about toolbars in section 3). The data entry form for new users will appear, with fields for surname, name and iButton code. You can jump from one field to the next with the [Tab] key, or the previous field with [Shift + Tab] or you can click with your mouse in the field you want to type in.

**The iButton code** is the series of hexadecimal digits engraved on the iButton. Fig. 2.3 shows an example of an iButton.

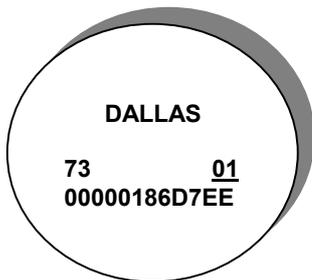


Fig. (2.3)

In this example, the number that has to be typed in (the iButton code) is 7300000186D7EE01. It is very important not to make a mistake with the entry of this number, since it serves to identify the owner and grant access to restricted areas.

When all the data has been entered you have to click on <OK> or hit [Enter]. The list on the left side should show the just entered data. If you pressed [Esc] or clicked on <Cancel> the data or changes you entered will be ignored.

This procedure has to be repeated for every user you wish to enter. You can add more than 63 users to the file, even though you will not be able to transfer more than this number to the terminal.

When you've finished entering the data you should save the file.

**Note:** the file you've just created and the access table of the terminal are not the same thing. Adding and deleting ID codes from the terminal's table will be explained later.

**Adding to the terminal's table.** Select the users (left side of the screen) you wish to copy into the terminal's table. This list has the same appearance as the right side of the **Windows Explorer** window. Users are selected in the same way here as files are selected in **Windows Explorer**. Click on the number of the user to select (column Num.). If you hold down the [Ctrl] key, you can select multiple users and copy them all at once into the access table. Copying into the access table: from the *Terminal* menu select *Add selected user to ID table*, or click on button 5 of Toolbar-2 (see section 3). You can observe the copying process on the right side of the screen, where a progress indicator shows how much there is to go. When the copying is finished the access table is automatically downloaded and you can check whether everything is OK. To see the names of the iButton users, activate the command *Terminal - Compare to file* (or button #7 of Toolbar-2).

After you've finished entering the access table, check if all the iButtons you entered activate the relay. If some of them don't, then you probably entered the code incorrectly. If this is the case, you should do the following:

- ❑ Delete the incorrect ID code from the terminal's access table
- ❑ Select the ID code to delete in the table on the right side (click on the *ID* column). Then, from the *Terminal* menu select *Remove selected ID* (or click on button #10 on Toolbar-2). Comm50 will ask you to confirm the deletion, if you click on <Yes>, the selected ID code will be deleted from the table.
- ❑ Correct the faulty ID code in the users file.

You can do this in two ways:

1. Double-click on the number of the user in question
2. Select from *Edit user* from the *Users* menu.

In both cases the form for user data will appear (the same as when entering data) and you can correct the iButton code that belongs to that user.

Copy the corrected ID code to the access table of the terminal.

The copying procedure has already been described.

If you did enter the ID code correctly, download the access table and check if it's there. Downloading the table can be achieved by the *Show ID table* command of the *Terminal* menu or clicking button #6 on Toolbar-2. If the code is not in the table, copy it again.

**Note:** It's important to note that when you're editing the ID table (whether with a MASTER or with a program COMM50) no iButtons should be touched to the contact cup and the sensor input should be shorted. This can be done by putting a jumper on the J1 header (behind the KL3 screw terminal) and removing the iButton contact screw terminal from the SL-50 PCB. This will ensure that anyone opening the door will not interrupt the editing process and nobody will touch their iButton while you are editing the tables. When you have finished editing the access tables, take off the jumper (you should only take it off if you are using a door sensor) and put the iButton screw terminal back.

## **4. Comm50's commands**

The commands can be performed in three ways:

1. activating menu items
2. clicking toolbar buttons
3. pressing accelerator keys

### **4.1. Menu**

Comm50, as most Windows programs, has two menus, which are active in different situations:

#### **A. no files are open**

Menu-1 is then active, which has the following elements:

**File** (commands: *New, Open, Open All Recent Files, Import and Exit*)

**View** (commands: *Toolbar, Statusbar*)

**Help** (command: *About Comm50*)

**B. at least one file is open**

Menu-2, is active, which has the following elements:

**File** (commands: *New, Open, Close, Import, Communication port and Exit*)

**View** (commands: *Toolbar, Statusbar*)

**Format** (commands: *Font*)

**Users** (commands: *Add user, Edit user, Delete, Select All*)

**Terminal** (commands: *Show ID table, Erase ID table, Add selected user to ID table, Remove selected ID, Compare to file, New Master, Read Master, Read Firmware*)

**Window** (commands: *Cascade, Tile Horizontally, Tile Vertically*)

**Help** (command *About Comm50*)

**4.2. Toolbar**

This is a line with command buttons that is right beneath the main menu of the program. The buttons on the toolbar have the functions of the commands in the main menu. Toolbars allow you to activate the functions with fewer mouseclicks. When no file (document) is open, only Toolbar-1 is visible (fig. 3.1). When one or more documents are open both toolbars are active (fig. 3.2).

fig. (3.1) : Toolbar-1



Button	Equivalent command	Function
1. 	File   New	Creates a new file (document) to hold user data
2. 	File   Open	Opens an existing file with user data
3. 	Help   About Comm50	Shows program and version information

Fig. (3.2): Toolbar-2



Button	Equivalent command	Function
	All users	Show all users in the file
	In Table	Show users in file who are also in the SL-50 ID table
	Not In Table	Show users in file who are not in the SL-50 ID table
	Users   Add User	Adds a new user to the user file

	Terminal   Add Selected User to ID table	Copies selected user to the terminal's access table
	Terminal   Show ID table	Downloads access table
	Terminal   Compare to File	Compares downloaded access table to the currently active user file and shows names alongside the ID codes
		Adds selected user from the terminal's ID table to the user file.
	Terminal   Erase ID table	Erases whole access table
	Terminal   Remove Selected ID	Deletes selected ID code from terminal's access table
		Unconditionally activates door strike relay
	Terminal   New Master	Sets a new Master iButton
	Terminal   Read Master	Reads ID code of current Master iButton
	Terminal   Read Firmware	Shows version of Firmware

### 4.3. Accelerator keys

Pressing a certain combination of keys on the keyboard, you can activate some of the functions of the program quickly, without messing about with the mouse. The valid accelerator key combinations are as follows:

- [Ctrl + N] – create new file (document)
- [Ctrl + O] – open existing file (document)
- [Ctrl + I] – import from TmlInput ASCII file
- [Ctrl + D] – format font
- [Ctrl + A] – add new user to file
- [Ctrl + E] – edit data for selected user

## 5. Working with files

The files you work with in Comm50 are documents that contain the data of the users of the access control system. Comm50 is a Multi Document Interface application, which means that more than one document can be open at one time. This can be useful if you have more than one SL-50 connected to your PC and you want to generate different access tables for each one. If this is not necessary, you can put all the users in one document and work only with that file. These files are in Microsoft Access '97 MDB format.

### 5.1. Creating a new document

*Menu:* File | New

*Accelerator:* [Ctrl + N]

*Toolbar-1:* 

This command creates a new, empty document that has to be filled in with data of the users of the system. When you first start Comm50 after installation, you have to create a new document.

At this point communication with the SL-50 is also initiated, if there is a free serial port. Take care not to open or create more files than you have free serial ports. If you do that, the file will be opened/created but communication will not be established.

If you have more than one SL-50 attached to your PC with the corresponding number of serial ports, the program will ask you to choose a specific serial port for that terminal.

**CAUTION: If you only have one SL-50 always open only one document (file). The program will detect a free serial port by itself.**

## 5.2. Opening an existing document

*Menu:* File | Open

*Accelerator:* [Ctrl + O]

*Toolbar-1:* 

This command opens an existing, previously created, document with user data. You will be using this command when you want to re-use an existing user database. Communication with an attached SL-50 is established. Take care not to open more files than you have free COM ports. If there are no more free ports left (these ports are not used by any application) the file will be opened but communication can't be established.

If you have more than one SL-50, with a corresponding number of COM ports, the program will let you select a specific COM port for each SL-50.

**CAUTION: If you only have one SL-50, open only one document (file). The program will detect and allocate a free COM port automatically. If you want the program to record events, you must open as many documents as there are terminals. If no documents are open, there will be no recording of events.**

## 5.3. Adding and editing user data

*Menu:* Users | Add user; Users | Edit user

*Accelerator:* [Ctrl + A], [Ctrl + E]

*Toolbar-2:* 

Adding a new user to the active document will summon the entry form user data. This procedure is explained in more detail in section 2.

The user data entry/edit form can also be summoned by double clicking on the number of the user in the left of the screen.

## 5.4. Closing the document

*Menu:* File | Close

Closes the active document and, if it's been changed and not saved since then, you will be asked whether you want to save the changes.

**CAUTION: by closing the document you are severing the communication with the SL-50 terminal which means that you will no longer have a log of subsequent events.**

## 6. Using the access table

### 6.1. Reading the access table

*Menu:* Terminal | Show ID table

*Toolbar-2:*



The access table is automatically downloaded (read) from the terminal when you open/create a document and when you edit the table. Use this command often to explicitly read the table, because the table can be altered with the master iButton too, so the table and your file can become unsynchronized.

### 6.2. Adding ID codes to the ID table

*Menu:* Terminal | Add selected user to ID table

*Toolbar-2:*



One or more users that are selected in the list on the left side of the screen are copied to the access table (more precisely, their iButton codes are copied). The exact procedure is explained in section 2. 2.

### 6.3. Deleting an ID code from the ID table

*Menu:* Terminal | Remove selected ID

*Toolbar-2:*



The selected ID code in the right-side table is deleted from the terminal's access table. The deletion procedure is explained in section 2.

### 6.4. Erasing the whole access table

*Menu:* Terminal | Erase ID table

*Toolbar-2:*



The entire access table of the terminal is erased. No iButton has any access rights after this operation. The Master iButton is not deleted.

## **7. Event registrations**

The events that the SL-50 terminal registers are the following:

### **1. iButton touched, it's in the table so the relay is activated**

Example:

<880000017A673001+>O

After this, two possible events may follow:

a) the door was opened, the relay was deactivated

>C

b) the relay was deactivated after the timeout but the door was not opened i.e. nobody came in

N>C

### **2. iButton touched, it's not in the table, hence the relay is not activated**

Example:

<5500000186BD15

### **3. Master iButton touched**

Example:

<370000017A7DAA01M

After this comes:

a) Addition of a new iButton to the ID table

a F30000017A7A3501\*

b) Deletion of an iButton from the ID table

d F30000017A7A3501\*

### **4. Door open**

<D

### **5. Relay active**

>O

After this one of two possible events follow:

a) The door was opened, the relay was deactivated:

>O>C

b) The relay was deactivated due to a timeout, without the door being opened.

>ON>C

Note: the relay can be activated by a PC command, the egress input or an active iButton.

### **6. Active alarm input**

<A

The described events are written into a text file called REG.TXT. Each event is timestamped according to the PC clock (day, month, and year).

## 8. Format of the registration file (REG.TXT)

Example:

Date	Time	Event	iButton ID	Comment
15.10.97.	16:51:51	O	F20000017A81EB01	Relay activated by iButton
15.10.97.	16:51:58	N	0000000000000000	Relay deactivated, nobody opened the door
15.10.97.	16:52:03	O	F20000017A81EB01	Relay activated by iButton
15.10.97.	16:52:06	C	0000000000000000	Door was opened and relay deactivated
15.10.97.	16:52:19	O	32000001A7E88701	Relay activated by iButton
15.10.97.	16:52:26	N	0000000000000000	Relay deactivated, nobody opened the door
15.10.97.	16:52:19	X	370000017A7DAA01	iButton touched that isn't in the access table
15.10.97.	16:52:38	M	2600000000BB50806	Master iButton
15.10.97.	16:52:45	a	370000017A7DAA01	iButton added to access table
15.10.97.	16:53:16	O	370000017A7DAA01	Relay activated by iButton
15.10.97.	16:53:24	N	0000000000000000	Relay deactivated, nobody opened the door
15.10.97.	16:53:33	O	0000000000000000	Relay activated without iButton
15.10.97.	16:53:36	N	0000000000000000	Relay deactivated, door not opened
15.10.97.	16:55:21	O	0000000000000000	Relay activated without iButton
15.10.97.	16:55:22	C	0000000000000000	Relay deactivated by door opening

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