

**SIDEKICK PC
USER'S MANUAL
VERSION 3.0**

TABLE OF CONTENTS

1. INTRODUCTION.....	4
1.1. ACRONYMS AND ABBREVIATIONS.....	5
1.2. SYSTEM REQUIREMENTS.....	6
1.3. AUTOMATIC SOFTWARE INSTALLATION.....	7
1.3.1. Overriding the default installation folder	8
1.3.2. Setup of the USB drivers for the Appliance Connection Kit	10
1.3.3. Uninstalling SidekickPC.....	11
1.4. SOFTWARE INITIALIZATION.....	12
1.4.1. License Activation.....	12
1.4.2. Internet Settings.....	14
1.4.3. Update Dialog.....	15
1.4.4. Software Auto Update	21
1.4.5. Database Update	22
2. HARDWARE CONNECTIONS.....	25
2.1. CONNECTING THE APPLIANCE TO THE PC	25
2.2. DISCONNECTING THE APPLIANCE FROM THE PC.....	28
2.3. CONNECTING THE SPARE BOARD TO THE PC	29
2.4. DISCONNECTING THE SPARE BOARD FROM THE PC.....	32
2.5. DETAILS FOR MACS CABLE CONNECTIONS	33
3. SOFTWARE OPERATION.....	35
3.1. SPARE BOARD INFORMATION FORM	38
3.2. STARTUP FORM	41
3.3. CONFIGURATION FORM.....	43
3.3.1. Configuration Form Menu Commands.....	48
3.3.2. Printing Extended Information in the label	54
3.4. IDENTIFICATION FORM.....	60
3.5. HISTORY FORM.....	62
3.6. MONITOR FORM	63
3.7. TROUBLESHOOTING WIZARD	65
3.8. GRAPH FORM	68
3.9. DIGITAL I/O FORM	69
3.10. TECHNICAL NOTES.....	70
3.11. DIAGNOSTIC PROCEDURE FOR COOKING APPLIANCES.....	71
3.11.1. Monitor	79
3.12. MACS BUS ACTIVITY	83
3.13. APPLIANCE INFORMATION	85
4. APPENDIX.....	88
4.1. MANUAL SOFTWARE INSTALLATION	88
4.1.1. SidekickPC Setup	88
4.1.2. SQL Server Management Studio Express Setup	100

4.2. TROUBLESHOOTING SETUP PROBLEMS	103
4.2.1. Manual installation of prerequisites	103
4.2.2. SQL Server installation problems.....	103

1. INTRODUCTION

Sidekick Enterprise Solution is a standard system designed by the **Global Technology Center (GTC)** department of Electrolux for the after sales support organization. The main target of this system is to provide field support engineers with a handy tool that, together with proper interface modules, simplifies the execution of diagnostic procedures and that allows an easy way to configure electronic boards.

Sidekick is an enterprise-wide system that integrates the most up-to-date information about Electrolux products into a client software tool. The client software (**SidekickPC**) lets you quickly diagnose appliances and create spare electronic boards. This is the User's Manual of this application.

Data integration between corporate databases and SidekickPC seamlessly occurs by means of web services that exploit the latest technologies in order to minimize update time and improve user experience and security.

There are many advantages in using a computer-aided service tool, for example:

1. the possibility to diagnose the appliances in less time and in a more precise way, thus reducing the amount of spare components required to fix the problem and the time of intervention. SidekickPC identifies if possible the appliance to test, gets and decodes the internal status of the electronic controller, and it executes the diagnostic procedures and troubleshooting steps you require;
2. the possibility to create spare electronic boards starting from “generic boards” with a programming and configuration procedure. This function ensures that you create the spare part in the same way as it was originally produced in the factory.

1.1. ACRONYMS AND ABBREVIATIONS

AMI	Appliance Mini Interface
ANC	Article Number Code
ACK	Appliance Connection Kit
BITS	Background Intelligent Transfer Service
BMP	Bitmap File
CCF	Cycle Configuration File
GTC	Global Technology Center
DNS	Domain Name System
ELC	Engineering Level Code
ESD	Electrostatic Discharge
GIF	Graphic Interchange Format
HTML	Hyper Text Markup Language
IP	Internet Protocol
JPG	Graphics file type developed by the Joint Photographic Experts Group
LBL	Label Definition File extension
MCF	Machine Configuration File
MDAC	Microsoft Data Access Components
MDI	Multiple Document Interface
MMC	Microsoft Management Console
PC	Personal Computer
PNC	Product Number Code
PNG	Portable Network Graphics
Prog	Progressive Insertion Number
SKC	Service Kit Code
SP1	Service Pack 1
SP2	Service Pack 2
SP3	Service Pack 3
SP4	Service Pack 4
SSE	Service Support Europe
TCP	Transmission Control Protocol
TDS	Technical Documentation System
TIFF	Tagged Image File Format
URL	Uniform Resource Locator
USB	Universal Serial Bus
WMI	Windows Management Instrumentation
WSE	Web Services Enhancements

1.2. SYSTEM REQUIREMENTS

Software prerequisites for **SidekickPC** are the following:

1. Microsoft Windows XP Professional SP3, Vista (all editions except the Starter Edition) and Windows 7 (all editions except the Starter Edition). Both 32-bit and 64-bit versions of Windows XP Professional, Windows Vista and Windows 7 are supported;
2. 1 GHz minimum processor speed;
3. 2 GB of RAM (4 GB recommended);
4. 15 GB of free hard disk space;
5. a CD or DVD drive, as appropriate, is required for installation from CD or DVD media
6. minimum monitor resolution of 1024x768 pixels for best usability. However it is also possible use a screen resolution of 1024x600 pixels. In this case, a vertical scroll bar allows you accessing the entire contents of the user interface forms;
7. Microsoft Windows Installer 3.1;
8. MDAC 2.8;
9. Microsoft .NET Framework 2.0 – SP2;
10. Microsoft WSE 3.0;
11. Microsoft Internet Explorer 6.0 SP1 or later;
12. Microsoft SQL Server 2005 Express Edition SP4 or SQL Server 2008 Express Edition. If in your PC you have already installed another edition of SQL Server 2005/2008, this item is not required.

Windows XP Home Edition is not supported because it lacks advanced security functionality that prevents proper support in case of problems.

Microsoft Internet Explorer 6.0 SP1 is software prerequisite for all installations of SQL Server 2005, as it is required for Microsoft Management Console (MMC) and HTML Help. A minimal installation of Internet Explorer is sufficient, and Internet Explorer is not required to be the default browser.

The automatic installation procedure of SidekickPC, installs all software pre-requisites and the SidekickPC software using default settings in an unattended way.

The installation procedure automatically installs Microsoft SQL Server Express Edition 2005 SP4 only if it does not detect the presence of an SQL Server 2005 or SQL Server 2008 instance in the local computer.

The detection of the presence of SQL Server instances occurs by means of the Windows Management Instrumentation (WMI) technology. In case the software installation procedure detects the presence of more than one instance of SQL Server, the selected database instance will be the first Express Edition that WMI enumerates or, if no Express Edition is present, the first enumerated instance.

If you want to override the default installation parameters of SidekickPC, you must install it manually. Please refer to the appendix for further information on this matter.

It is possible that you are able to setup and use SidekickPC in a computer that does not meet these minimum system requirements. However, in this case, Electrolux will not be able to help you if you have any problems.

1.3. AUTOMATIC SOFTWARE INSTALLATION

The automatic installation procedure consists in the **AutoInstall.cmd** command file. This is a sequence of batch commands that install all software pre-requisites and the SidekickPC software using default settings.

You must log on as full Administrator in order to make the installation of the software.

By default, the automatic software installation procedure installs SidekickPC in the **C:\Electrolux\SidekickPC** folder.

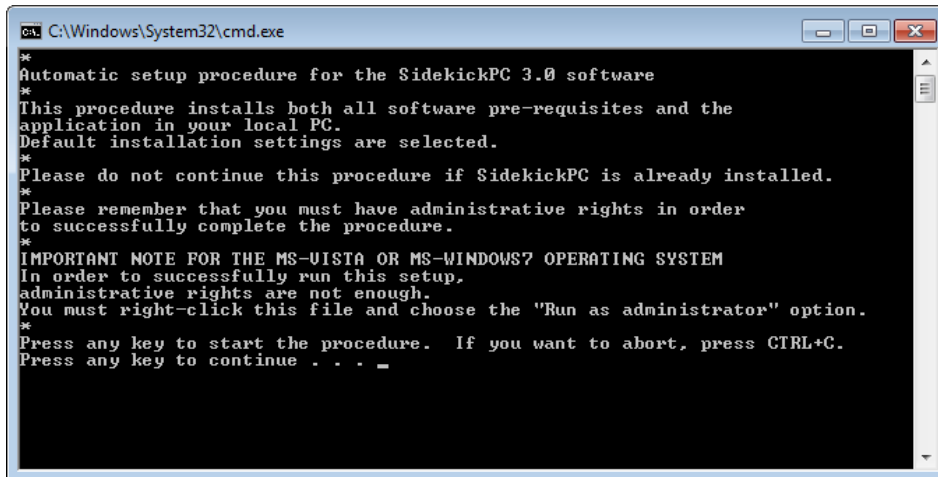
You can however override this default and setup the software in a different directory. Please refer to the next paragraph if you need to change the default installation directory.

The following recommendations apply:

1. **Windows XP:** simply double-click the **AutoInstall.cmd** file.
2. **Windows Vista and Windows 7:** right-click the **AutoInstall.cmd** file and then select the "**Run as Administrator**" option. Depending on your actual configuration, the operating system may ask you for a further authorization. Please remember that, under Microsoft Vista and 7, you must explicitly execute **AutoInstall.cmd** as administrator even if you are already logged in with an administrative account.

Please remember that this setup procedure does not install the programs that are already installed in your PC. In addition, the automatic setup procedure implements some workarounds to a few known setup problems of the SQL Server 2005 software. One of these workarounds consists in temporarily disabling network connectivity during the setup of this software. For this reason, please do not worry if you see a warning that refers to a "limited network connectivity" issue during the setup.

Another workaround consists in uninstalling and re-installing the SQL Server 2005 Client Tools. After you start the execution of **AutoInstall.cmd**, you can see the welcome screen:



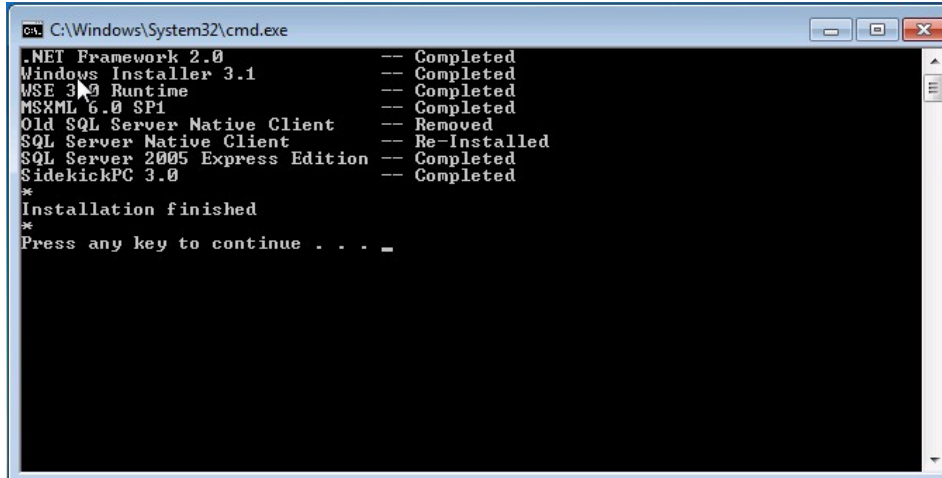
```
C:\Windows\System32\cmd.exe
*
Automatic setup procedure for the SidekickPC 3.0 software
*
This procedure installs both all software pre-requisites and the
application in your local PC.
Default installation settings are selected.
*
Please do not continue this procedure if SidekickPC is already installed.
*
Please remember that you must have administrative rights in order
to successfully complete the procedure.
*
IMPORTANT NOTE FOR THE MS-VISTA OR MS-WINDOWS7 OPERATING SYSTEM
In order to successfully run this setup,
administrative rights are not enough.
You must right-click this file and choose the "Run as administrator" option.
*
Press any key to start the procedure.  If you want to abort, press CTRL+C.
Press any key to continue . . . -
```

Fig. 1. Automatic setup: welcome setup

If you press CTRL+C you can abort the procedure.

If you press instead any other key combination, the automatic setup starts. Depending on your computer configuration, the setup procedure may last several minutes.

At the end of the automatic setup process, you can see the list of installed software packages:



```
C:\Windows\System32\cmd.exe
.NET Framework 2.0          --- Completed
Windows Installer 3.1     --- Completed
WSE 3.0 Runtime           --- Completed
MSXML 6.0 SP1             --- Completed
Old SQL Server Native Client --- Removed
SQL Server Native Client  --- Re-Installed
SQL Server 2005 Express Edition --- Completed
SidekickPC 3.0            --- Completed
*
Installation finished
*
Press any key to continue . . .
```

Fig. 2. Automatic setup: end of procedure

There is the possibility that during the setup sometimes goes wrong. In order to help you solve setup problems Electrolux has documented all known setup issues and workarounds.

You can find the solution for these problems here:

<http://sidekick.electrolux.com/SidekickPortal/UsersReservedArea/DownloadDetails.aspx?ContentID=ApplicationNote3>

In case you have problems with the automatic setup procedure, you should try installing SidekickPC in a manual way. Please refer to the Appendix for information concerning the manual setup.

1.3.1. Overriding the default installation folder

If you want to install SidekickPC in an automatic way but not in the default folder (C:\Electrolux\SidekickPC), you can open the **AutoInstall.cmd** file with any text editor (such as, for example, Notepad) and change the following line:

```
SET SK_DIR=C:\Electrolux\SidekickPC
```

You should assign to the **SK_DIR** environment variable the full path of the target directory. For example, if you want to install the software in the D:\ driver instead of the C:\ one you can change the line in the following way:

```
SET SK_DIR=D:\Electrolux\SidekickPC
```

Then you should save the file and quit the editor. Finally run the modified **AutoInstall.cmd** command as the previous paragraph describes.

Please ensure that **SK_DIR** is assigned a valid folder name.

In addition, please remember that you cannot install SidekickPC within the following special directories:

1. **Program Files:** this is the folder that usually contains applications. In English versions of the operating system this is the **C:\Program Files** folder;
2. **Common Application Data:** this is the common application data folder. In English versions of the operating system this is the **C:\Documents and Settings\All Users\Application Data** folder;
3. **System:** this is the folder that contains system files. In English versions of the operating system this is the **C:\Windows\System32** folder.

The setup process by design does not allow you installing SidekickPC in the **Program Files** folder, in order to avoid functional problems under Windows Vista and Windows 7 when you execute the program from a limited user account. In this case, the “Virtual Store” feature in MS-Vista would prevent the proper operation of the program.

1.3.2. Setup of the USB drivers for the Appliance Connection Kit

After completing the installation of SidekickPC, there is another important installation that you must perform prior leaving the administrative mode in the PC: you must install the USB drivers for the Appliance Connection Kit.

In order to perform this step you must have an Appliance Connection Kit (ACK) that Service Support Europe (SSE) should have given you. You should connect the USB interface of the interface module to the PC by means of the supplied cable. The operating system recognizes that this is the first time that you connect the device to the PC and prompts you for the installation of the drivers.

The drivers are copied to the hard disk during the setup of SidekickPC in the **USB Drivers** directory starting from the installation folder. The default driver directory is:

C:\Electrolux\SidekickPC\USB Drivers

You can find detailed instructions on how to setup the USB drivers in the “**Appliance Interface Modules USB Setup v 4.0**” manual that is installed during the setup of SidekickPC.

Please remember that the sequence of operations that are required to install USB drivers varies a lot depending on the actual operating system and configuration of your PC.

1.3.3. Uninstalling SidekickPC

At a certain point you may want to remove the application from your PC. You can remove it as any other Windows application by means of the **Add/Remove Programs** applet in the **Control Panel**.

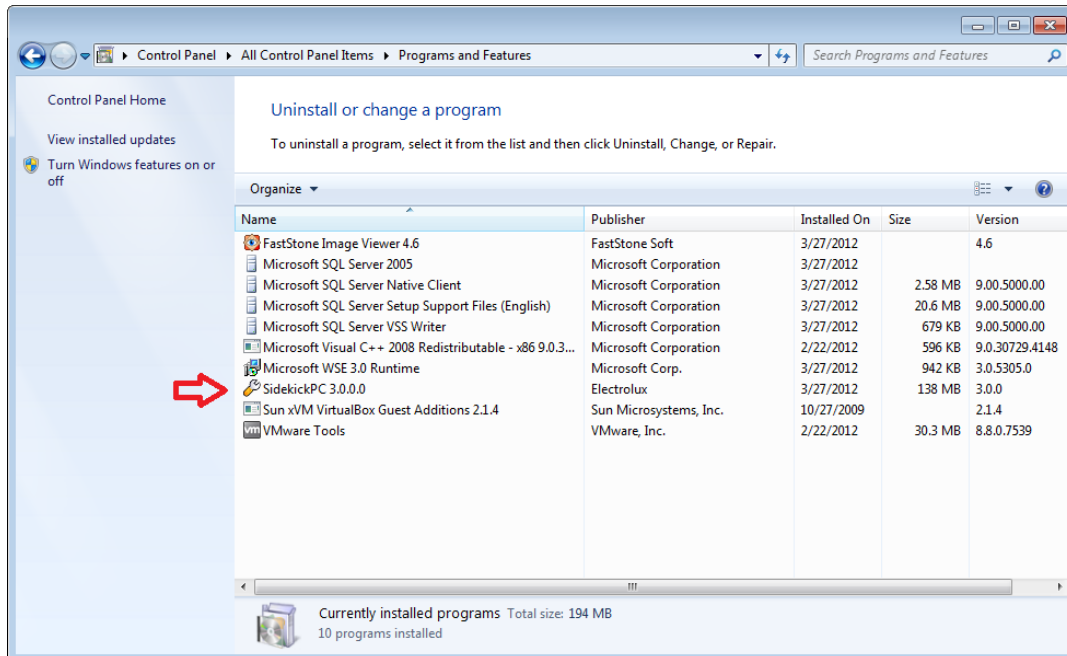


Fig. 3. Removing the SidekickPC application

You must log on as full Administrator in order to remove the software.

When you remove SidekickPC, the uninstall procedure asks you if you want to delete also the local SQL Server database. Please remember that, under Windows Vista and Windows 7, the dialog box that asks you to remove or not the database may be hidden by other windows: the uninstall procedure looks as if it is “frozen”. In this case, you should just check for the presence of the dialog and choose “**Yes**” or “**No**” to continue.

1.4. SOFTWARE INITIALIZATION

1.4.1. License Activation

After that you have successfully installed the program and the USB drivers you can log off as Administrator and log on as a normal user. At any rate, the first thing that you are required to do the first time you run SidekickPC is to activate the software license. Please remember that, in order to activate the software license, your PC must be connected to the internet.

The first time you run the software, you can see this message:

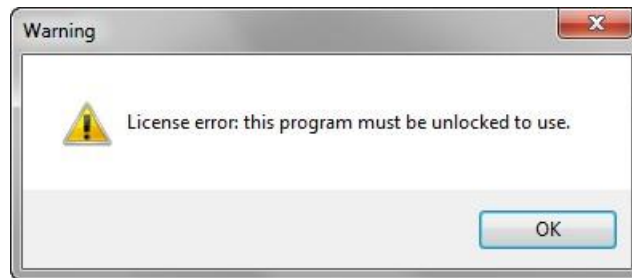


Fig. 4. License Activation Request

After that you press the **OK** button, you should execute a few initial configuration steps for your software:

- Language (optional)
- Internet Settings (mandatory if you are going to use non-standard settings)
- License Activation (mandatory)

You may want to choose a display language other than English. In this case you must use the dialog box that you can see if you select the **Language** command in the **Options** menu.

If you are going to use non-standard internet proxy, you must select proper Internet Settings. You can see the corresponding dialog if you select the **Internet Settings** command in the **Commands** menu. For detailed information on this matter, please refer to the corresponding section later in this chapter.

Finally, you must activate your software license by means of the **License Manager** dialog. You can see this dialog if you select the **License Manager** command in the **Commands** menu. In most cases you only need to specify the **License Number** (if you have not already specified it during manual setup) and press the **Internet Activate** command:

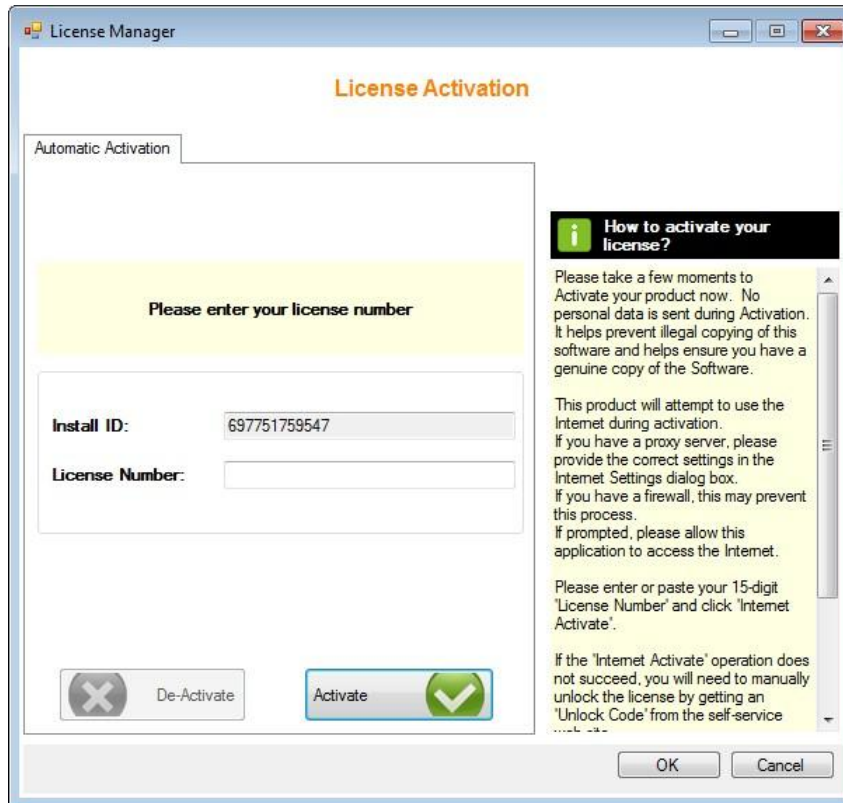


Fig. 5. License Activation Request

After you press the **Activate** button, you should quickly see the following message:



Fig. 6. License Activated

Press OK to close the License Manager dialog.

The **De-Activate** command allows you removing the license from your PC. After you de-activate the license in one PC you can activate it in another PC.

1.4.2. Internet Settings

If an internet connection error occurs, please verify that you are really connected to the network and check your proxy settings in the dialog that you can activate in **Commands >> Internet Settings**:

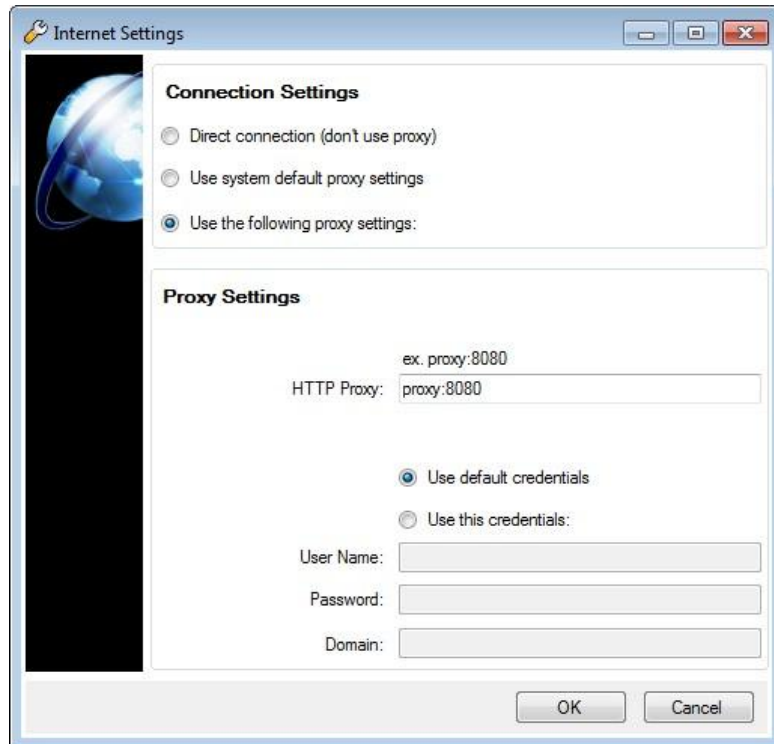


Fig. 7. Internet Settings Dialog

Sometimes invalid proxy settings are the reason of internet license activation and local database update failures. By default the setup program activates the option that uses “system default proxy settings”. In some cases this option does not work and you must explicitly specify your proxy configuration. The **Connection Settings** section lets you specify the way you are connected to the internet. The following options are available:

1. **Direct connection (don't use proxy)**: use this option if your PC is directly connected to the internet;
2. **Use system default proxy settings**: use the settings that you have specified in the Internet Explorer or Google Chrome web browsers, if you have installed them in your PC. If the proxy you are using requires explicit authentication (username and password), you cannot use this option but you must explicitly specify credentials with the “**Use the following proxy settings**” option;
3. **Use the following proxy settings**: use this option to explicitly specify your proxy settings. If you use this option you must fill-in the **Proxy Settings** section. The **HTTP Proxy** field allows you to specify the DNS name or the IP address of your proxy. The default TCP port for the proxy is 80. You can specify another port by separating the DNS name (or IP address) to the port number by means of a colon. If your proxy requires authentication, you must specify also the **User Name**, **Password**, and **Domain** fields.

1.4.3. Update Dialog

With the Update Dialog you can perform the update of the local database and the auto-update of the software by means of a connection to the remote web server. You can activate this dialog with the **Commands >> Update** menu item.

Opening the dialog, if the software loads from the configuration file wrong settings, a dialog box advice you that all default parameters will be applied:



Fig. 8. Invalid Parameters Warning dialog

In this case all textboxes in the form will be editable.

Otherwise, if update parameters settings are correct, by default the content of all textbox is read-only. If you want to edit the parameters, unlock the dialog box by clicking the icon on the top right side of the form.



Fig. 9. Lock/Unlock option

Local database updates occur in a very simple way and are executed through the interaction of SidekickPC with a remote web service that copies information from the Electrolux central Sidekick database to your local computer.

The software fully relies on the local database contents. You cannot operate the software if the local database is empty. For this reason, you must perform the initial full database update, prior using SidekickPC for the first time.

Software auto updates are instead executed through the interaction of the application with the web portal which provides a dedicated section for the publication of update files.

Each update consists in a single ZIP file that contains all necessary information that you need to perform the software update of your local installation of SidekickPC. The system first downloads this file in your local PC, and then it extracts information and applies the software upgrade. For the

download of the software upgrade file, the software uses a technology from Microsoft called Background Intelligent Transfer Service (BITS).

Both software and database updates start by clicking the **Start update** button. Every time you issue this command, SidekickPC automatically checks for available software updates before executing the database update procedure.

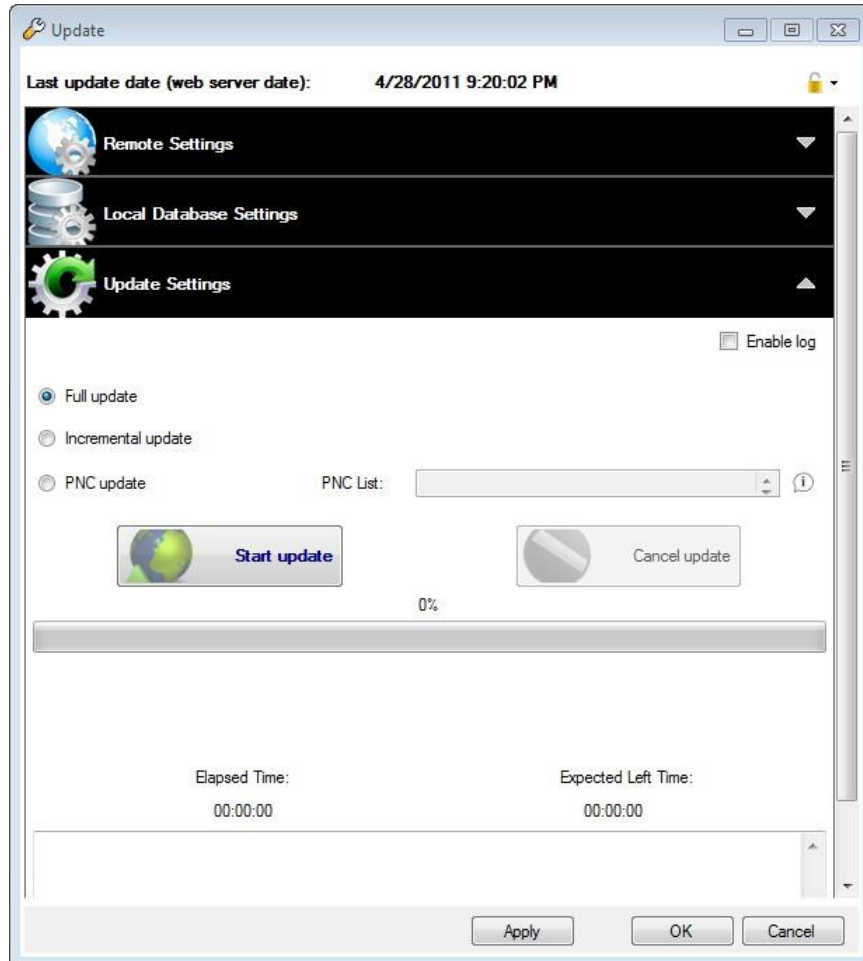


Fig. 10. Update Dialog

The **Remote Settings** section lets you specify the connection options for the web service:

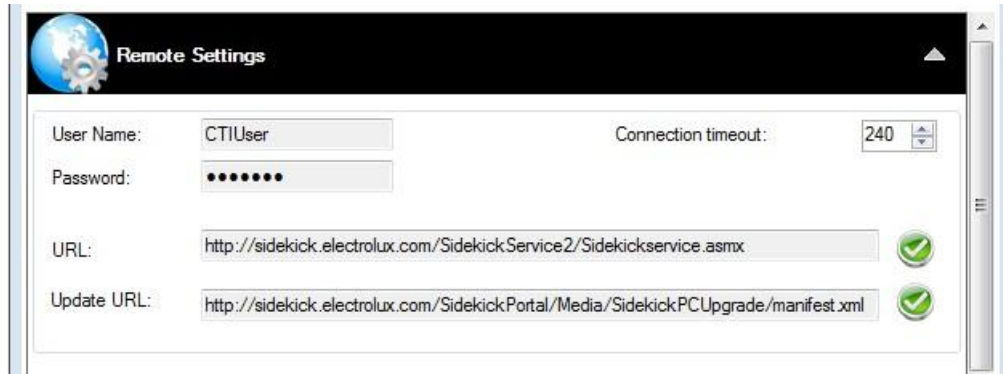


Fig. 11. Remote Settings section

1. **User Name** and **Password** specify your personal credentials to access the web service. You should use the User Name and Password that you receive by mail when your license is activated. You can use the same credentials to enter also the reserved area in the Sidekick web portal that, depending on the different situations, you can reach with one of the following addresses:

- a. <http://sidekick.int.electrolux.com/SidekickPortal>
- b. <http://sidekick.electrolux.com/SidekickPortal>

Also for the URLs of the Sidekick web portal are valid the same remarks as the URLs for the web service;

2. **Service URL**: the intranet or internet address to reach the web service. Depending on the different situations, you can use one of the following URLs:
 - a. <http://sidekick.int.electrolux.com/SidekickService2/SidekickService.asmx>
 - b. <http://sidekick.electrolux.com/SidekickService2/SidekickService.asmx>


Addresses containing the “int.electrolux” portion are only visible from inside the Electrolux network or through a VPN application (Anira). Electrolux may change or remove some of the above URLs in the future. For this reason, you should ask Service Support Europe to know which address you should actually use in your case;

3. **Connection Timeout**: this option specifies the maximum response time of the web service in seconds. If your internet connection is very slow and you get a timeout error during updates, you can increase this value and try again.

With the manual installation procedure, which this document describes in the appendix, you can explicitly select the initial value for the options in this section. The automatic installation instead defines default settings that you may need to override. For sure you must define at least your personal credentials to access the web service: **User Name** and **Password**.

4. **Update URL:** the intranet or internet address to reach the web portal that provides the auto update feature of the software. Depending on the different situations, you can use one of the following URLs:
 - a. <http://sidekick.int.electrolux.com/SidekickPortal/Media/SidekickPCUpgrade/manifest.xml>
 - b. <http://sidekick.electrolux.com/SidekickPortal/Media/SidekickPCUpgrade/manifest.xml>

Addresses containing the “int.electrolux” portion are only visible from inside the Electrolux network or through a VPN application (Anira). Electrolux may change or remove some of the above URLs in the future. For this reason, you should ask Service Support Europe to know which address you should actually use in your case.

5.  **Test connection** command connects to the web portal to verify if you have specified the correct internet address.

The **Local Database Settings** section lets you specify the connection options for the local SQL Server database:

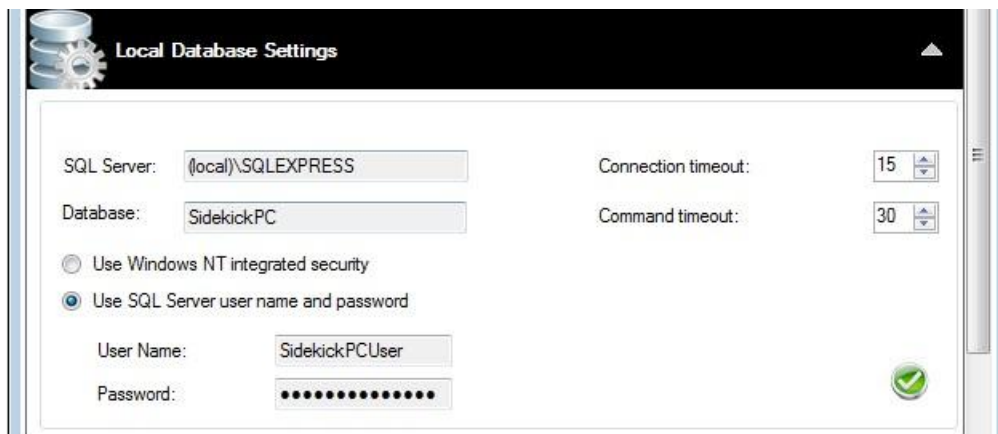



Fig. 12. Local Database Settings

1. **SQL Server:** the name of the SQL Server instance that stores your local database. By default the instance name is (local)\SQLEXPRESS. You select the server name at installation time only if you perform the manual installation procedure as this document describes in the appendix;
2. **Database:** the name of the local Sidekick database. By default the database name is **SidekickPC**. You choose the database name at installation time only if you perform the manual installation procedure as this document describes in the appendix;
3. the **Use Windows NT Integrated Security** option allows you accessing the database through the integrated security of the operating system;

4. the **Use SQL Server user name and password** option allows you accessing database by means of explicit credentials. This is the default way to access to local database. The **User Name** and **Password** fields specify your personal credentials to access the database. You choose the user name and the password to access the local database at installation time only if you perform the manual installation procedure as this document describes in the appendix;
5. with the **Connection Timeout** and **Command Timeout** you can specify the connection and command timeouts (in seconds) for the operations related to the local database. Usually you do not need to alter these settings;
6.  **Test Connection** command allows you connecting to the database to verify if you have specified the correct settings.

The **Update Settings** section lets you specify the type of the update.

1. **Full update:** use this option if you want to perform a full update of the local database. In this case all local data are removed (if any) prior executing a full copy of the remote database contents to the local database. The full update involves all Electrolux appliance models (PNCs) supported by SidekickPC. A full update is mandatory prior using the software for the first time after the setup;
2. **Incremental update:** use this option if you want to download only the new records from the remote database. This is the most common update after the initial setup. The incremental update involves all Electrolux appliance models (PNCs) supported by Sidekick;
3. **PNC update:** use this option if you want to download only the new records related to a certain set of PNCs from the remote database. The **PNC List** entry allows you to specify the list of PNCs (one or more up to 20) that you are interested in. The PNC list is a sequence of comma-separated PNCs. A PNC (Part Number Code) is a numeric code of 9 digits that identifies a certain appliance model from Electrolux. In the **PNC List** you should not supply the ELC (Engineering Level Code): downloading data for a certain PNC means getting the update for all related ELCs. Instead of commas you can also use semicolons (;), hyphens (-), and forward slashes (/) as a separator. An example of a valid PNC List the following one: 914791101,913101218,914521544;
4. the **Enable log** option creates a log file during the update process. This option is useful for troubleshooting purposes.

The **Start update** command both starts the auto-update of the software and the update of the local database.

If one of the URLs is a not valid address the following dialog box appears:

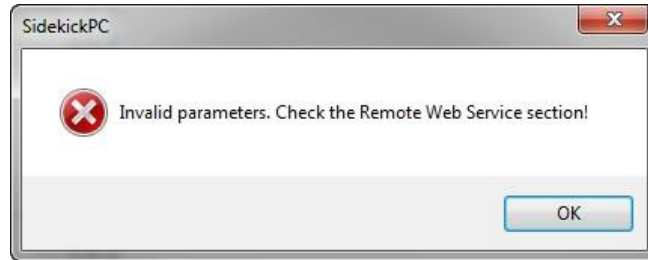


Fig. 13. Invalid URLs: error dialogs

1.4.4. Software Auto Update

Every time you click on **Start update** button, the software checks if there is a software update available.

If not, the process continues with the update of the local database. Instead, in case an update is available, a dialog box that specifies a short description of the upgrade is shown:

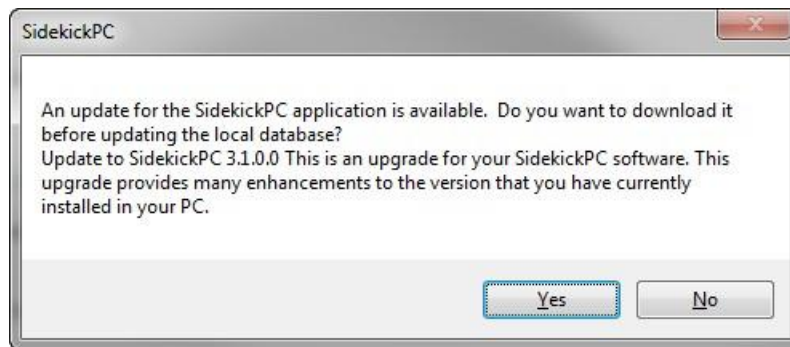


Fig. 14. Optional Software Update Notification

If the update is mandatory, the software informs you that the update will be applied before proceeding with the local database update. If the update is instead optional you can skip it and start immediately the database update.

By clicking the **Yes** button, the download of the upgrade files starts. During the download of the software upgrade file, the Update dialog box shows you a progress bar and some messages that indicate the state of the process.

When the download is finished a message asks you to quit the application in order to apply the changes.

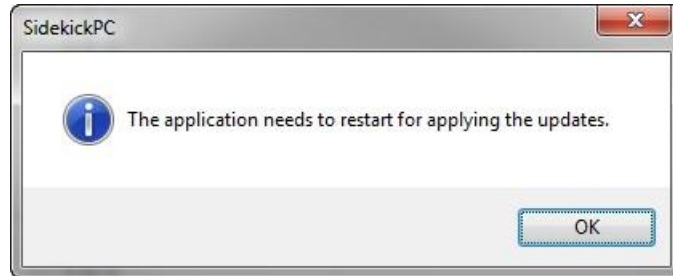


Fig. 15. End of Software Update Download

By pressing the **OK** button, the real software update starts. The downloaded files are extracted from the ZIP archive and, after a backup of the existing application files, the current application files are replaced with the new ones. In addition, the software upgrade may also involve changes in the configuration parameters and/or in the structure of the local database.

While the system applies the software upgrade you can see a dialog that shows you some information. As soon as this process finishes you should press the **OK** button in the SidekickPC Software Upgrade dialog:

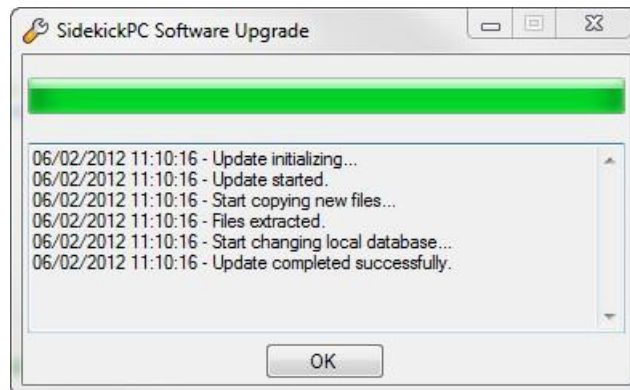


Fig. 16. End of Software Update Application

After you press the **OK** button, SidekickPC restarts automatically.

If any errors occur during the software upgrade process, the system rolls-back all changes.

1.4.5. Database Update

The update of the local database starts when you press the **Start update** button and either there is no software update available, or after that you have decided to skip an update that is not mandatory.

Depending on your update options and internet connection speed, the update process may require a long time to complete. During the update, a progress bar and some feedback messages indicate the state of the update process. The update occurs within a local database transaction. This means that if you press **Cancel update** or any error occurs during the update, all changes to the local data will be


roll-backed and the local data will stay unchanged. Changes to the local data are committed only at the end of the update, if no errors occur.

The **Cancel update** command cancels the update procedure.

The **OK** button closes the dialog and saves the settings you have changed.

The **Cancel** button closes the dialog without saving the settings you have changed.

As previously specified, prior using SidekickPC for the first time you must execute a Full update.

Please click the **Test Connection**  in the Remote and Local Database sections to check if the connections to the remote web service and to the local database work. If necessary, select the **Full Update** option and then press the **Start update** command. You should see feedback messages indicating the progress of the operation. The initial full update may take several minutes or even hours to complete, please be patient. At the end you should see the completion notification:

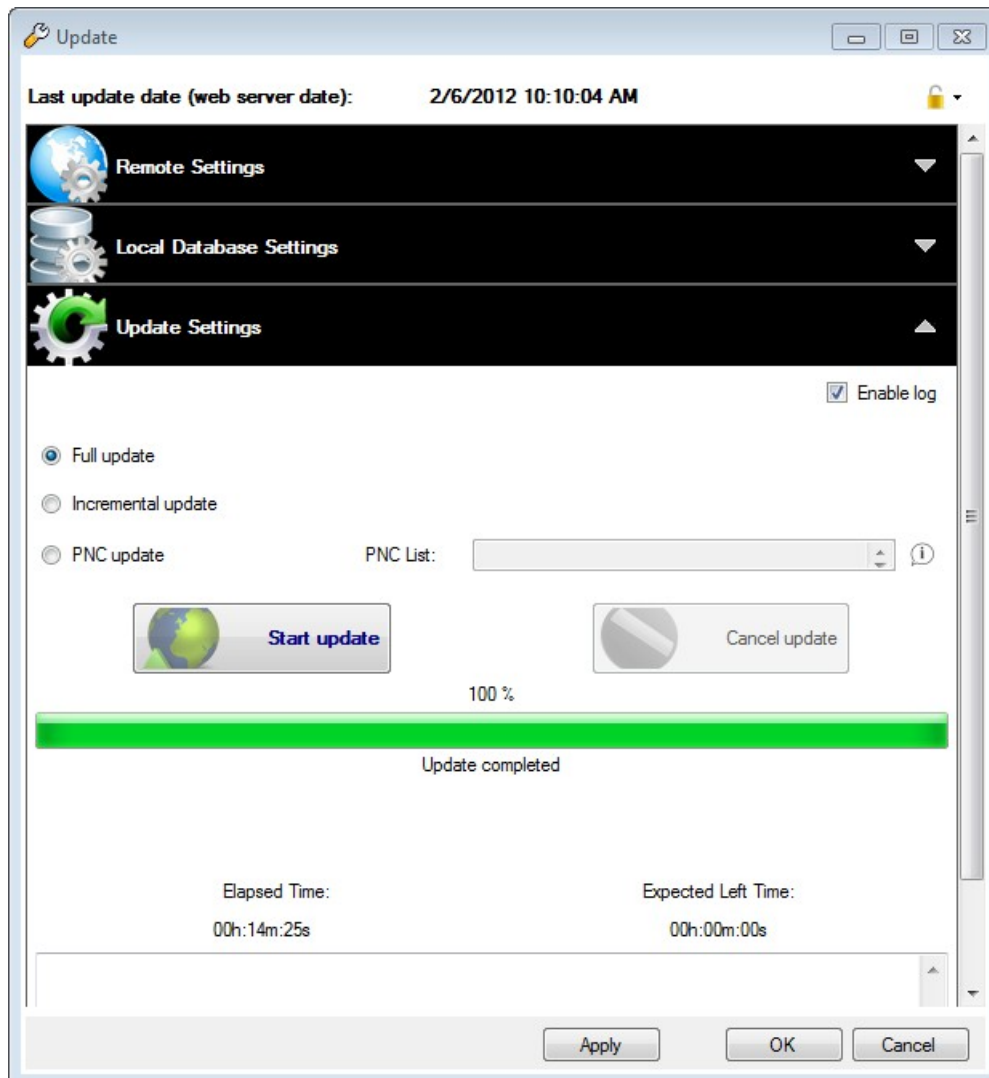


Fig. 17. Update Dialog: operation complete

On the top status bar of the dialog you can see the date and time of the last update. This indicator displays the date and time of the last Full or Incremental update.

The timestamp that the software shows after the Full update refers to the date and time of when the server prepared the files for the full update. This operation occurs usually once during the night (European time).

The timestamp that the software shows after the Incremental update refers to the actual date and time of the update operation.

Keep in mind that this is the date of the server not the date of your local PC. Please remember that the PNC update does not change this value.

After that you have executed a full update, press **OK** and you are ready to start using the software.

2. HARDWARE CONNECTIONS

This chapter provides information regarding the correct way to connect and disconnect the SidekickPC workstation to the appliance under test or to the electronic board to configure.

2.1. CONNECTING THE APPLIANCE TO THE PC

CAUTION! In order to avoid the risk of electrical shock only skilled personnel should use and install the Appliance Connection Kit. The connection of all items should occur only when the appliance is powered off and, if possible, unplugged from the power supply. Also the adapter module should be off.

If the Appliance Connection Kit uses the USB interface of your PC, please remember that you should always employ a fully-shielded High-Speed USB 2.0 cable. This type of USB cable provides a good level of reliability for the communication between the PC and the appliance.

If you want to diagnose an appliance or update its electronic board configuration, you should connect it to the PC. To connect the appliance to the PC you need to do the following steps:

- Turn off the interface module (if it has a separate power supply).
- If necessary, disconnect the interface module from the PC (disconnect the USB cable).
- Turn off the appliance and, if possible, unplug it from the power supply.
- **Important: wait at least 5 seconds BEFORE touching the board or the interface cable to prevent Electro Static Discharge (ESD) damage risk.**
- Open the appliance cabinet in order to reach the electronic board connector. For instance in a typical washing-machine: remove 2 screws from the cover on the backside of appliance.

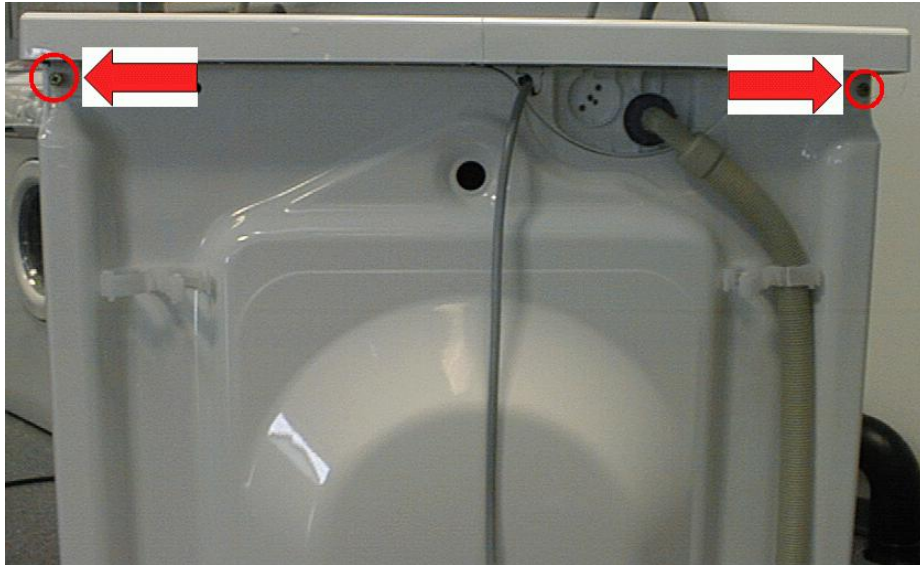


Fig. 18. Appliance backside view

- Typical washing-machine example: slide the top cover back and (if necessary) remove the plastic shield from the electronic board using the plastic tips, which you find at each end. In some types of appliance you only need to open the plastic tip that protects the interface connector in the electronic board.
- Connect the adapter module to the appliance using the interface cable as shown in the following picture.



Fig. 19. Appliance with adapter connected

- Connect back the appliance to the power supply and turn it on.
- Turn on the adapter module (if it has a separate power supply).
- Connect the adapter module to the PC using the USB cable.



Fig. 20. Laptop PC USB connectors

- Run the SidekickPC software.

The above sequence of steps guarantees user's safety and reduces the risk of damage due to electrostatic charges. It also avoids the storage of the FREQUENCY OF APPLIANCE INCORRECT (EH1 or EB1 in Fabric Care appliances) alarm that is generated when the board is supplied by the interface module instead of the mains power supply (230 VAC).

VERY IMPORTANT NOTE!

Since the interface module is able to power the electronic board even if the appliance is not connected to the mains supply, the appliance may detect false alarm conditions if the adapter is turned on before the appliance.

For this reason you should ALWAYS turn on the appliance under test BEFORE turning on the adapter and connecting it to the Personal Computer.

Conversely, you should ALWAYS turn off the adapter and disconnect it from the Personal Computer BEFORE turning off the appliance under test.

2.2. DISCONNECTING THE APPLIANCE FROM THE PC

You should do the following steps to disconnect the PC from the appliance:

- Disconnect the USB cable from the PC.
- Turn off the appliance and, if it possible, unplug it from the mains power supply.
- **Important: after the power off of the appliance, wait at least 5 seconds BEFORE touching the board or the interface cable to prevent Electro Static Discharge (ESD) damage risk.**
- Disconnect the adapter module interface cable from the electronic board.

The above sequence of steps guarantees user's safety and reduces the risk of damage due to electrostatic charges. It also avoids the storage of the FREQUENCY OF APPLIANCE INCORRECT (EH1 or EB1 in Fabric Care appliances) alarm that is generated when the board is supplied by the interface module instead of the mains power supply (230 VAC).

2.3. CONNECTING THE SPARE BOARD TO THE PC

CAUTION!

In order to avoid the risk of electrical shock only skilled personnel should use and install the Appliance Connection Kit. You should NEVER power on the spare board from the mains supply (230VAC) when it is not installed in the appliance.

In most cases the adapter interface module provides the necessary power to the board during the configuration procedure, without the need of connecting the mains supply.

Before handling the electronic board, you should discharge your body from possible electrostatic charges, by touching one conductive object connected to earth.

In addition, you should never touch both neither the board nor the adapter module interface connector during configuration program download and, in general, when the board supply is present. These precautions reduce the risk of damaging the electronic board because of electrostatic discharges.

If you want to create a spare board for a specified appliance, you should connect the naked board to the PC for the configuration. To connect the board to the PC you need to do the following steps:

- Turn off the interface module (if it has a separate power supply).

- Connect the adapter module to the board using the interface cable as shown in the following picture.



Fig. 21. Board with appliance cable connected

- Connect the adapter module to the PC using the USB cable and turn on the adapter module. This operation turns on the spare board as well.

VERY IMPORTANT NOTES!

You may hear an intermittent beep when the spare board is powered on by the adapter. This beep is due to the fact that the board detects a false alarm condition since it is not yet installed in the appliance.

When you turn on an appliance for the first time after you have reconfigured it, or after you have replaced the electronic board, the machine may automatically start the electric test (the electric test is only used in the factory at the end of the assembly line). Turn the appliance on and off to set it back in normal mode.

COOKING APPLIANCES NOTES!

Programming of some spare boards for cooking appliances require connection to the mains power supply (230 VAC)!

In this case it is necessary to mount the board in the appliance before programming.

For more details regarding these boards refer to the specific documentation.

2.4. DISCONNECTING THE SPARE BOARD FROM THE PC

CAUTION!

In order to avoid the risk of electrical shock only skilled personnel should use and install the Appliance Connection Kit. You should NEVER power on the spare board from the mains supply (230VAC) when it is not installed in the appliance.

The adapter interface module provides the necessary power to the board during the configuration procedure, without the need of connecting the mains supply.

Before handling the electronic board, you should discharge your body from possible electrostatic charges, by touching one conductive object connected to earth.

In addition, you should never touch both neither the board nor the adapter module interface connector during configuration program download and, in general, when the board supply is present. These precautions reduce the risk of damaging the electronic board because of electrostatic discharges.

You should do the following steps to disconnect the PC from the spare board:

- Disconnect the USB cable from the PC.
- **Important: wait at least 5 seconds BEFORE touching the board or the interface cable to prevent Electro Static Discharge (ESD) damage risk.**
- Disconnect the adapter module interface cable from the board.

2.5. DETAILS FOR MACS CABLE CONNECTIONS

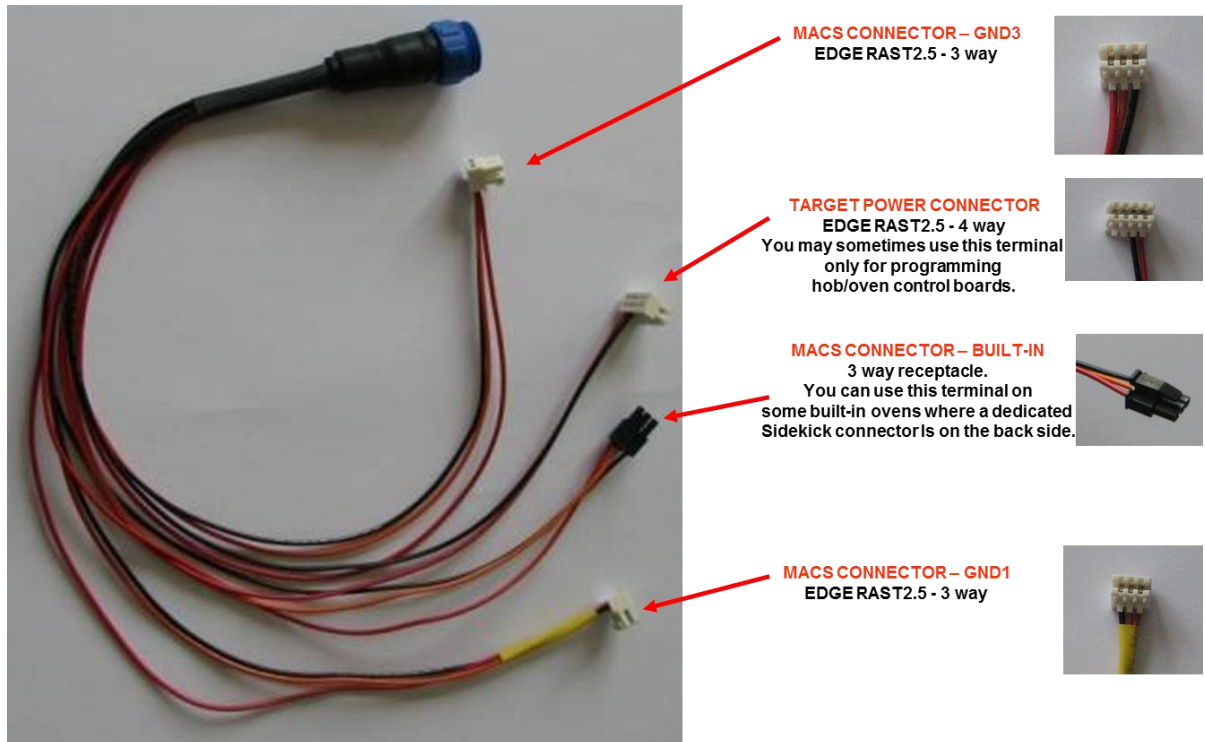


Fig. 22. Sidekick MACS Cable for Cooking

When using the Sidekick MACS cable it is important to properly set the **Secondary Power Switch** in the Appliance Mini Interface (AMI).

With this switch you select if the AMI module should provide or not power supply to the target board.

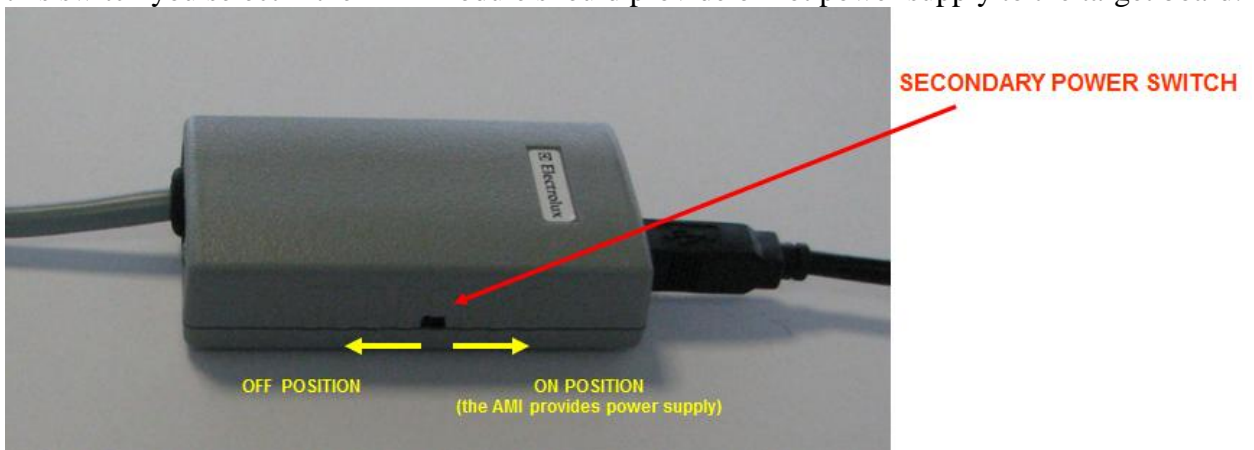


Fig. 23. AMI Power switch

When the Secondary Power Switch is in the **ON position**, the USB cable is connected to the PC, but the target cable is NOT connected to the board or appliance, the **Secondary Power LED** on the side of the target cable is ON.

When the Secondary Power Switch is in the **OFF position**, the **Secondary Power LED** turns ON only when the target cable is connected and the board or appliance under test is turned on with the mains power supply.

As a general rule:

1. you should turn the switch ON when programming standalone boards not connected to the mains power supply;
2. you should turn the switch OFF when programming standalone boards connected to the mains power supply or when connecting to appliances.

3. SOFTWARE OPERATION

This chapter deals with the **SidekickPC** utility functions. The program consists of a main window that is a container of all other functional windows (forms). The main window follows the Multiple Document Interface (MDI) approach. Using MDI allows you opening many forms at the same time during the diagnostic procedure.

The following figure displays the main form:

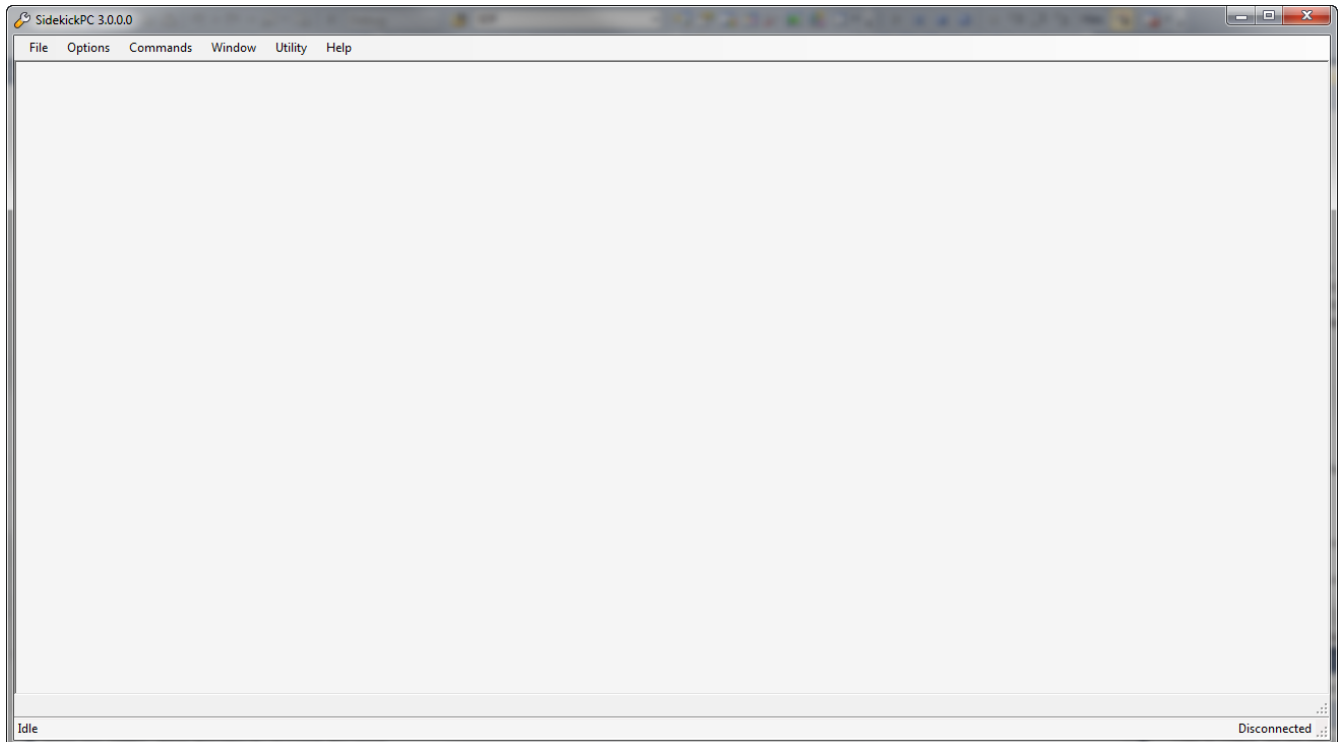


Fig. 24. Main Form

The main form contains the **pull-down menu** placed just below the title bar. The main menu items are: **File**, **Options**, **Commands**, **Window**, **Utility**, and **Help**.

The **Start Page** command in the File menu activates the Startup Form.

The **Exit** command in the File menu quits the application.

The **Communication** command in the Options menu shows the **Connection Settings** dialog box that allows specifying the maximum communication speed for connecting to the target appliance or to the board:

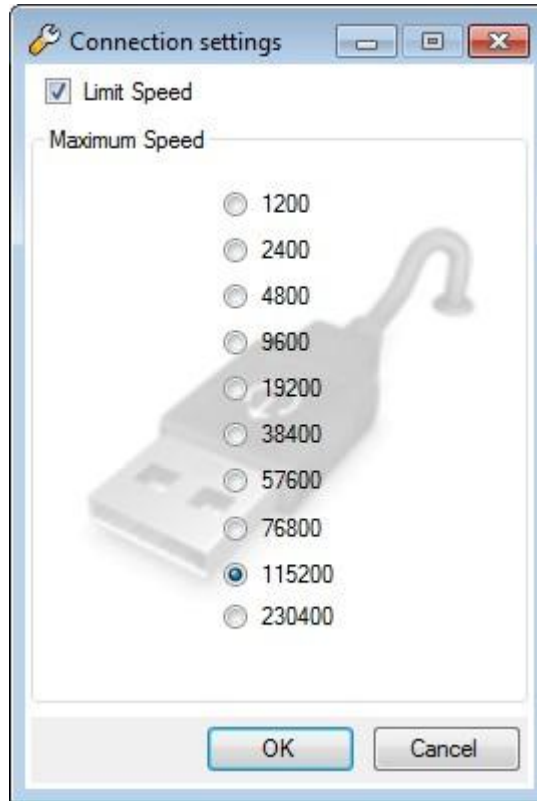


Fig. 25. Connection Settings

You do not usually need to change any settings in this dialog box.

The **Language** command in the Options menu shows the **Language** dialog box that allows choosing the display language:



Fig. 26. Language Selection

The **Update** command in the Commands menu shows the Update Dialog already described in Chapter 1.

The **License Manager** command in the Commands menu shows the License Manager Dialog already described in Chapter 1.

The **Internet Settings** command in the Commands menu shows the Internet Settings Dialog already described in Chapter 1.

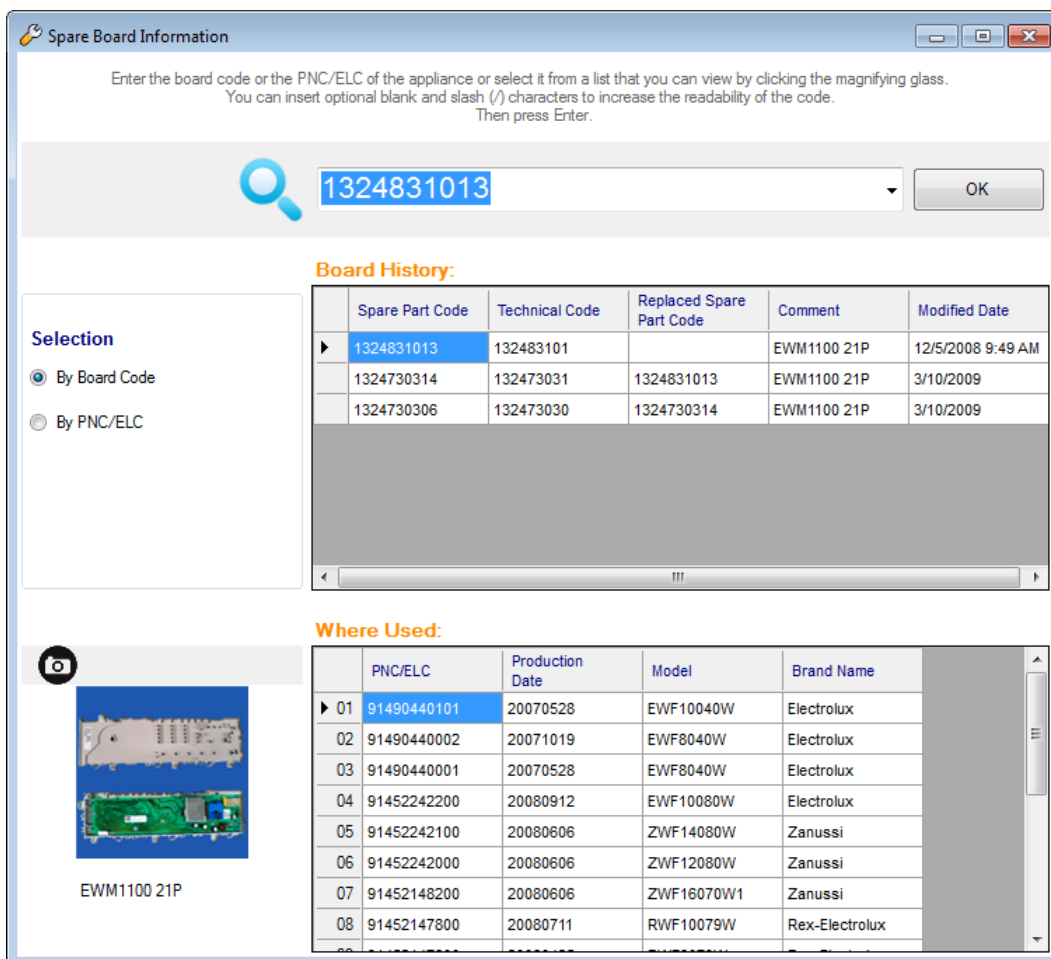
The **Windows** menu contains various commands that simplify arrangement of forms in the workspace.

The **Utility** menu contains the **Spare Board Information** command that shows all information from TDS (Technical Documentation System) database about spare board codes, the replacement history and the list of all PNC/ELCs that are related to the selected board. The next paragraph describes this function.

The **Help** menu contains only the command to display the About Dialog box.

3.1. Spare Board Information Form

The **Spare Board Information** window displays all information about a spare board starting either from the board code (with or without check digit) or from the PNC/ELC of the appliance.



Enter the board code or the PNC/ELC of the appliance or select it from a list that you can view by clicking the magnifying glass. You can insert optional blank and slash (/) characters to increase the readability of the code. Then press Enter.

1324831013 OK



Board History:

	Spare Part Code	Technical Code	Replaced Spare Part Code	Comment	Modified Date
▶	1324831013	132483101		EWM1100 21P	12/5/2008 9:49 AM
	1324730314	132473031	1324831013	EWM1100 21P	3/10/2009
	1324730306	132473030	1324730314	EWM1100 21P	3/10/2009

Selection

By Board Code

By PNC/ELC

 
EWM1100 21P

Where Used:

	PNC/ELC	Production Date	Model	Brand Name
▶	91490440101	20070528	EWF10040W	Electrolux
02	91490440002	20071019	EWF8040W	Electrolux
03	91490440001	20070528	EWF8040W	Electrolux
04	91452242200	20080912	EWF10080W	Electrolux
06	91452242100	20080606	ZWF14080W	Zanussi
05	91452242000	20080606	ZWF12080W	Zanussi
07	91452148200	20080606	ZWF16070W1	Zanussi
08	91452147800	20080711	RWF10079W	Rex-Electrolux

Fig. 27. Spare Board Information Form

In the left side of this form there is the **Selection** group that lets you choose search criteria.

You can start your search either from the PNC/ELC of the appliance or from the Spare Part Code that in TDS identifies the generic not configured electronic board.

The text field lets you enter either the **PNC/ELC** or the **Board Code**.

You can insert optional blank and slash (/) characters in order to increase the readability of the code that you enter.

When you click the combo box, a drop-down list, containing the last 5 used codes appears.

If you click on  image, a list containing all the PNC/ELC Codes or Board Codes stored in the database appears.

You can select one item from the generated list and you have the possibility to restrict the selection list by filling the **Starts with** field.

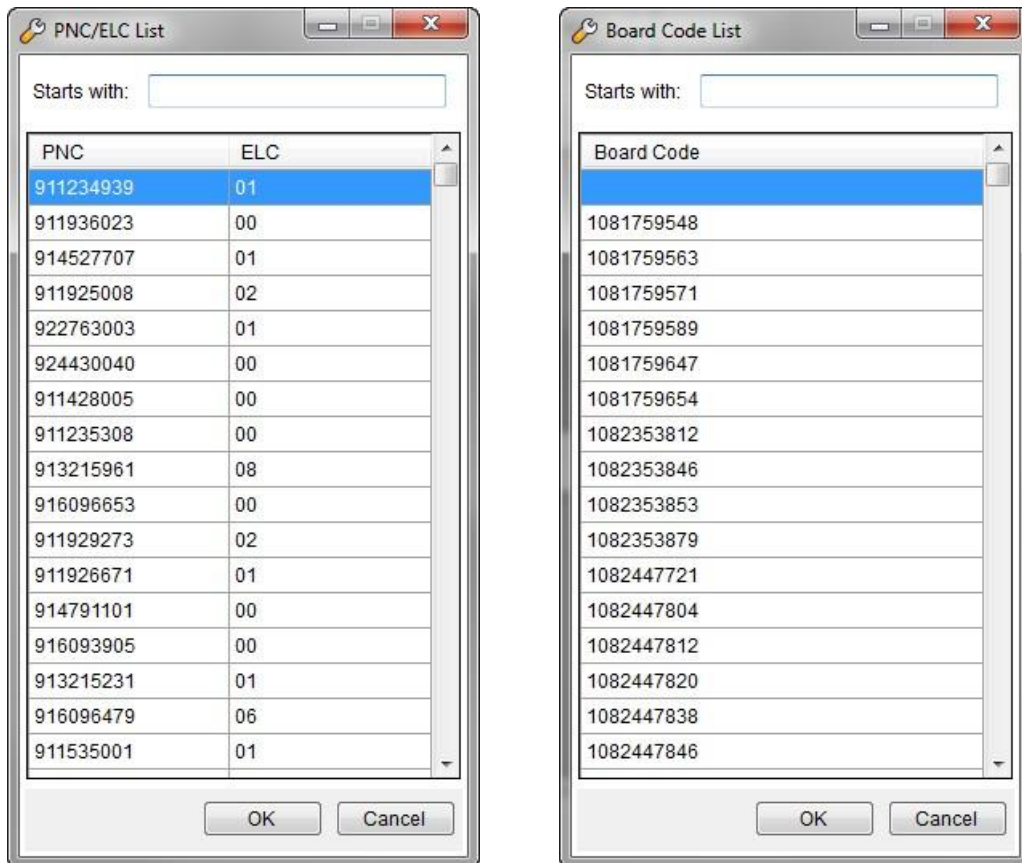


Fig. 28. Board Code List and PNC/ELC List Forms

When you enter the code and press either the **ENTER** key or the **OK** button, SidekickPC searches for matches with the specified code in the local database. If it finds the specified code, the software automatically populates the form.

This form shows search results in 2 grids.

The upper grid provides the **Board History** that shows a list of spare board codes (with related Technical Code) as well as additional information. In particular **Replaced Spare Part Code** shows the code of a more recent board that replaces the board identified by the current record. If the value of this field is **(Empty)** this board is the most recent one since it has not been replaced yet.

The software sorts the list so that the first record refers to the most recent board according to the information from TDS.

The software highlights in red the board code used to populate the grid. At the bottom left side of the form the software also displays a picture of this board, if available.

While the **Spare Part Code** refers to the code that you should use to buy the not configured board from Electrolux, the **Technical Code** indicates the code that Electrolux uses to buy it from suppliers.

In many cases the Technical Code and the Spare Part Code are the same except the check digit. However, sometimes, these codes are different.

The Technical Code is often printed in a label attached to the board or to its plastic case. As a consequence, the code that you read in this label may differ from the code that you use to buy the part from Electrolux.

The lower grid, **Where Used**, shows all PNC/ELCs, with the corresponding Model, Brand, and date of first production that employ the selected board code. This information is similar to the "Where Used" function in TDS, with the advantage that it takes into consideration the replacement history, not only the bill of material from factories at the date of production.

In some cases, selecting a code by PNC/ELC, more than one board may be present in that specific product. As a consequence, more than one record may be found inside the local database. In this case a list containing **Spare Part Code**, **Plant**, **Board Name**, **Product**, and **Platform** appears, allowing you choosing the specific electronic board that you want to analyze.

Select	Service Kit Code	Plant	Board Name	Platform	Spare Part Code
<input checked="" type="checkbox"/>	973925781831012	ZS	COOLER	ERF2001	2425666035
<input type="checkbox"/>	974925781831011	ZS	FREEZER	ERF2001	2425666035

Fig. 29. Board Selection Form

3.2. Startup Form

When you run the program you see the Startup form:

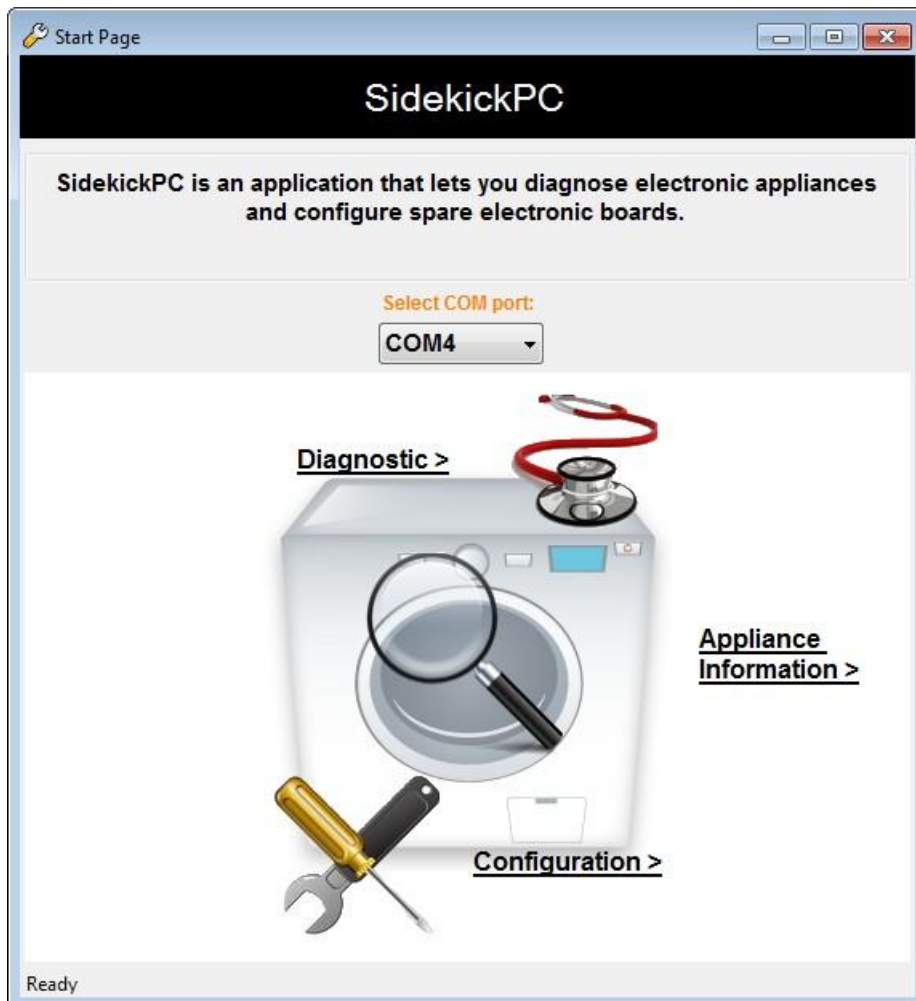


Fig. 30. Startup Form

The **Select COM port** list lets you choose the communication port. The software automatically detects the available serial ports on the PC and, if possible, it selects the port that you have selected in the previous SidekickPC session.



Diagnostic lets you start the appliance diagnostics function. When you click this icon the software connects to the appliance under test and identifies it (*). Then the program shows you the Identification form with the main configuration parameters in the connected appliance.

(*) The identification procedure depends on the type of the appliance, for diagnostic functionality of cooking appliances refers to chapter 3.41.



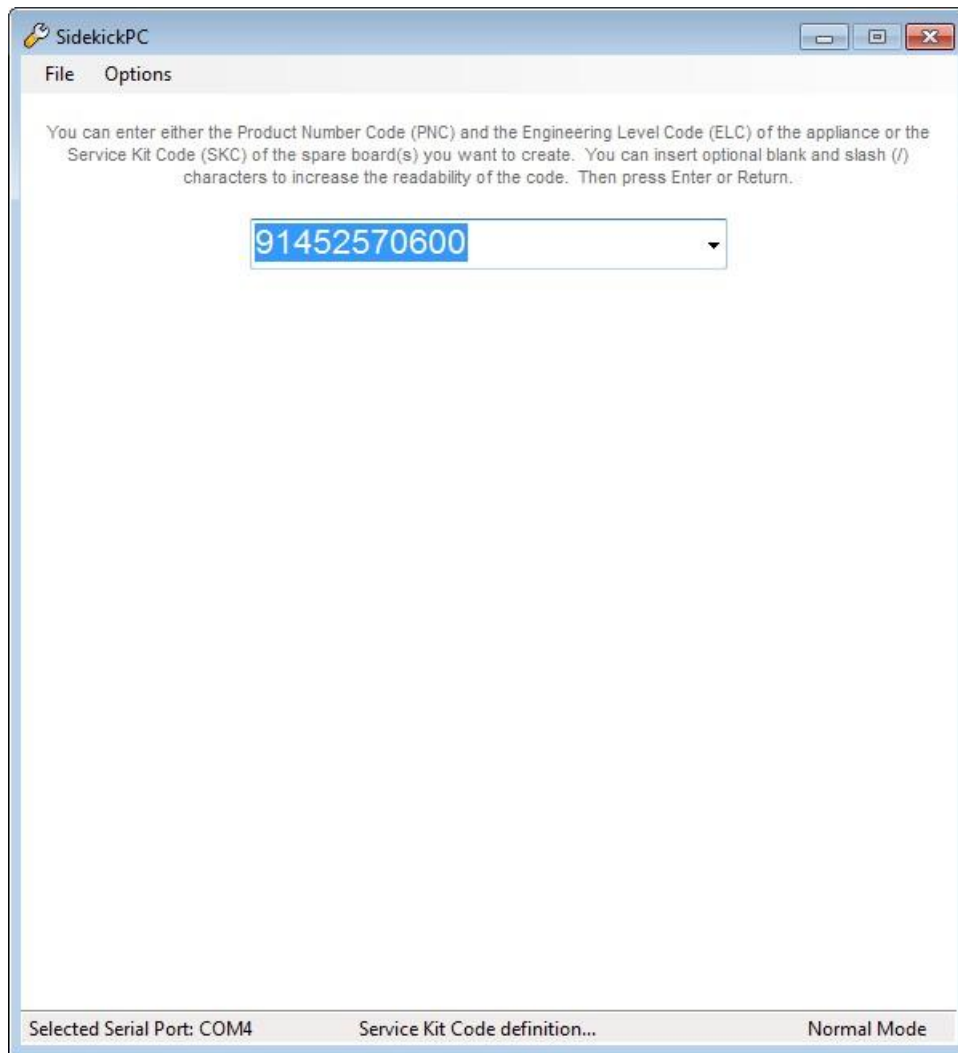
Configuration lets you enter to the board configuration function. When you click on this icon, SidekickPC shows you the Board Configuration form.



Appliance Information lets you to get detailed information regarding test, alarms, and the troubleshooting procedures of a specific appliance model that you identify by means of the PNC/ELC. Please remember that this function only works for those appliances that SidekickPC is able to diagnose.

3.3. Configuration Form

This is the form that appears when you press the **Configuration** button in the Startup Form. With the Configuration form you either create a spare board or upgrade the electronic configuration of an appliance.



The screenshot shows a software window titled "SidekickPC" with a menu bar containing "File" and "Options". The main area contains the following text: "You can enter either the Product Number Code (PNC) and the Engineering Level Code (ELC) of the appliance or the Service Kit Code (SKC) of the spare board(s) you want to create. You can insert optional blank and slash (/) characters to increase the readability of the code. Then press Enter or Return." Below this text is a text input field containing the code "91452570600". At the bottom of the window, a status bar displays "Selected Serial Port: COM4", "Service Kit Code definition...", and "Normal Mode".

Fig. 31. Configuration Form

The **Code Selection** field lets you enter either the **PNC/ELC** of the appliance that you want to upgrade or the **Service Kit Code (SKC)** of the configured spare board that you want to create.

The PNC/ELC is always an 11-digit code that identifies the Electrolux appliance model.

The SKC instead identifies the code of the kit for a configured spare board in the TDS system.

The Service Kit Code is defined according to the following convention:

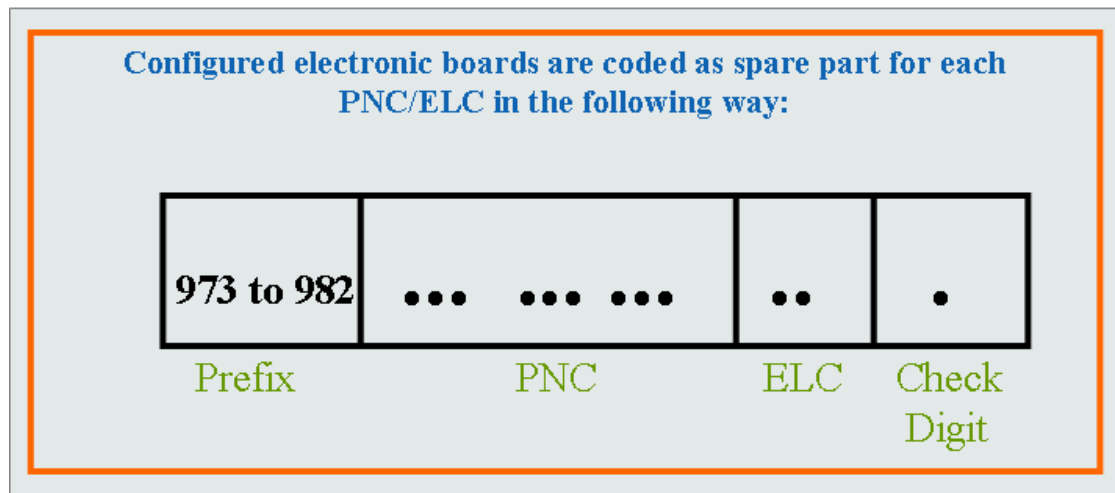



Fig. 32. SKC Convention for Fabric Care, Dish Care, and Food Preservation

Reserved prefixes in TDS are from 973 to 982. This means that each PNC/ELC can define up to 10 different configured boards.

The prefix in all products that only feature one configurable board is 973.

The actual value of the prefix within the same PNC/ELC depends on the numeric value of the ANC of the board used in production. The SKC prefix is assigned in ascending order with respect to the ascending order of the ANC. In other words, the lowest prefix (973) is assigned to the board with the lowest ANC.

You can insert optional blank characters, hyphens and slashes, between one digit and another, to increase the readability of the inserted code. The software ignores all extra characters that you may insert for improving the readability of the code.

SidekickPC keeps a list with the most recently used codes. You can click the select button  on the right side of the Code Selection field and choose one of these items instead of manually entering the digits each time you enter a new code.

When you press the ENTER key, SidekickPC searches for matches with the specified code in the internal database. If it finds the specified code, SidekickPC automatically processes the information for the configuration of the specified spare board.

If the specified code does not exist in the database, the software just shows an error message.

If the specified code exists in the database, the first panel information appears:

- **Brand** and **Model** of the corresponding appliance is shown on top;
- **Spare Board** if available, with photo and description;
- **Connection cable** if available, the corresponding board cable connector to use with photo and description.

You can then enter the number of identical boards to configure:



Fig. 33. Quantity Definition

After the quantity definition, press the ENTER key again and you are ready to start the configuration. This means that you can connect the appliance board to the PC and press OK to start the programming procedure:

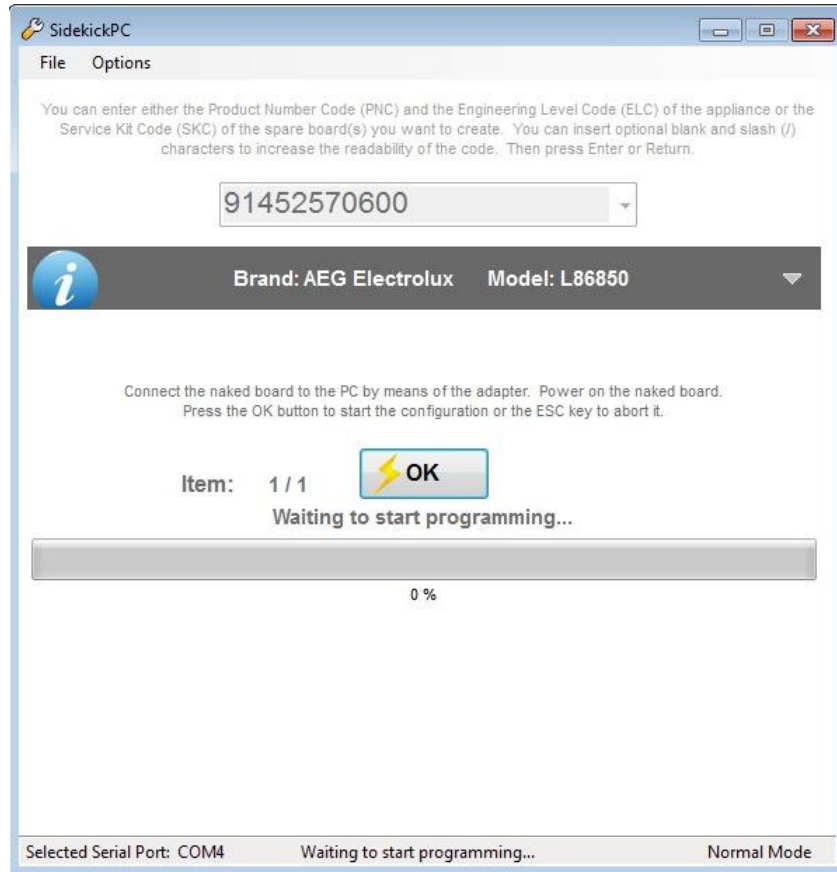



Fig. 34. Start Programming

When you press the OK button to start the configuration of the board, at first the program identifies the naked board. If the naked board you are using is not suitable for the appliance model you have selected, SidekickPC issues an error message and prevents you further actions with the board. Otherwise it immediately starts the board configuration procedure.

The board configuration procedure occurs using the information contained in the local database. During the execution of this command the target device goes into a special mode. After the programming procedure, SidekickPC resets the board and it performs a check of the configuration.

The **Last operation results** panel shows the result of the last board programming operation.

The GREEN color highlights successful result, RED failure. In case of success, you can see statistics regarding the operation. In case of failure you can see a description of the error (if you click the **Copy**

to Clipboard button  on the right side of the panel, you copy the message result to clipboard):

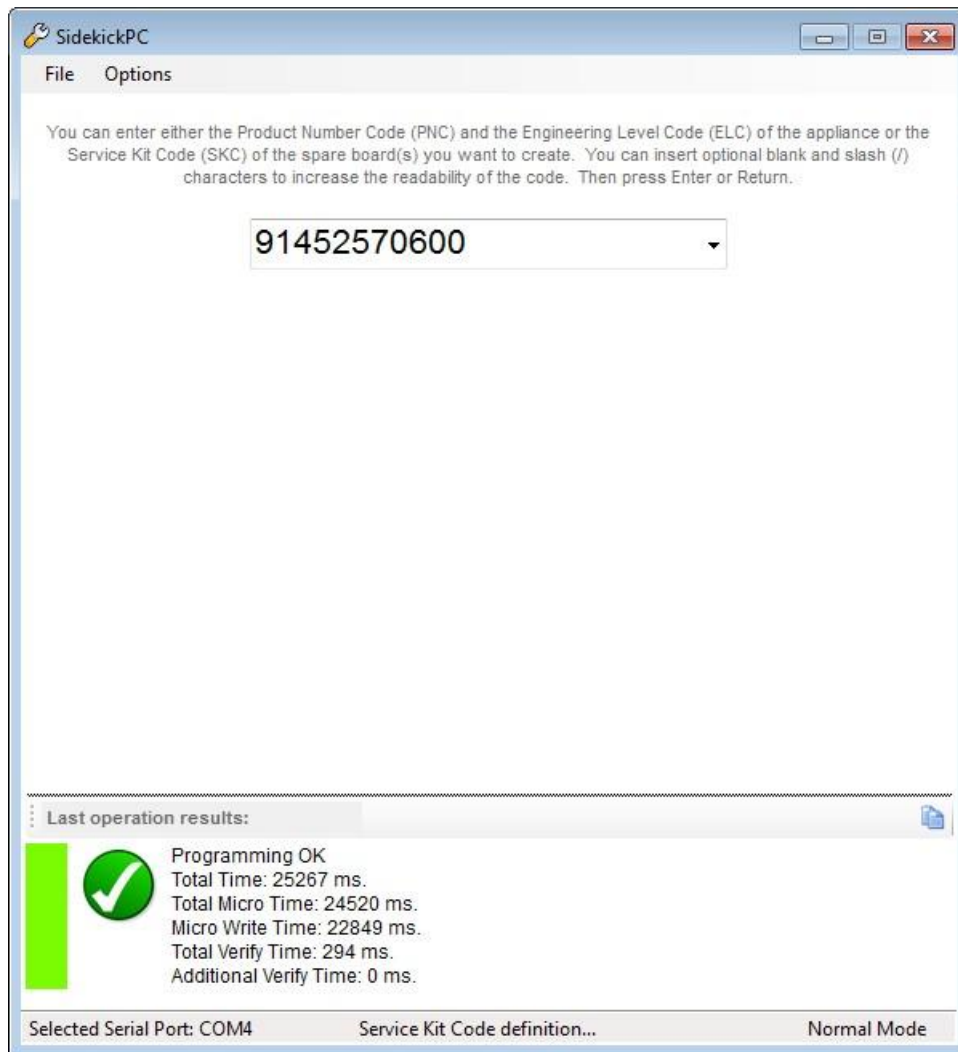


Fig. 35. Last operation result

Please note that all board programming operations are recorded in the local database (Database Log) and that are uploaded to the remote server whenever you execute a database update operation.

VERY IMPORTANT NOTES!

The board may become unusable if the board programming operation fails for any reason.

During the programming procedure it is highly recommended not to detach the connection cables, not to switch off the interface module, not to touch the board to prevent Electro Static Discharge (ESD) damage risk or otherwise interrupt the operation since the board may become unusable. Interrupting a programming operation may lead to an unusable board.

In the above cases, recovering the board may require special programming tools. This program does not provide this capability.

3.3.1. Configuration Form Menu Commands

The Configuration form has a pull-down menu with the following items: **File** and **Options**.

The **Exit** command in the File menu just closes the form.

The **Additional Verify** command in the Options menu shows the **Additional Verify** dialog box that allows activating an extra configuration Verify step after the board programming procedure:



Fig. 36. Additional Verify Dialog

With this dialog box you can enable/disable an additional board configuration check and set the coverage of memory locations (in percent of whole memory space) that will be checked after the programming procedure. Greater values mean more verifying time. The minimum coverage value is 5%.

The **Programming Log** command in the Options menu shows the **Programming Log** dialog box:

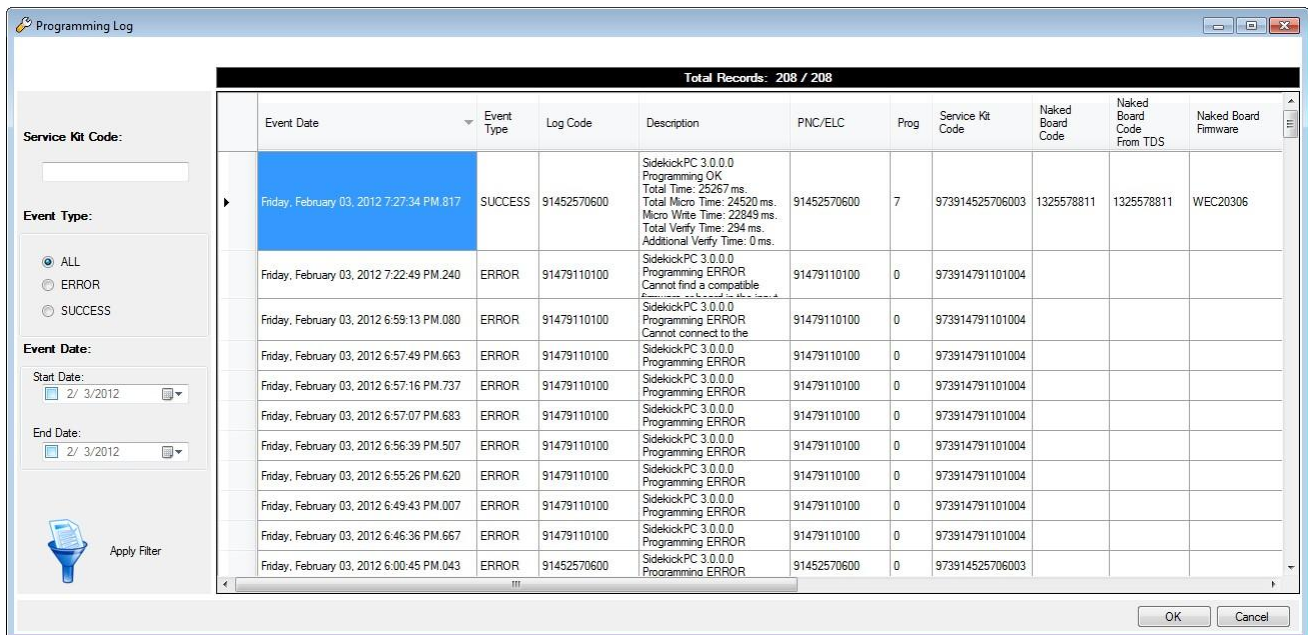


Fig. 37. Programming Log Dialog

The Programming Log dialog shows you information regarding board configuration activities. The program is able to keep a track of all boards that have been configured in the workstation.

Each record stores the information regarding a programming operation. The meaning of each field in the programming log record is the following:

- **Event Date:** date and time of the programming operation;
- **Event Type:** a string that identifies the result of programming (ERROR, SUCCESS);
- **Log Code:** a short string that stores the code as inserted by the operator;
- **Description:** additional information regarding the programming operation;
- **PNC/ELC:** the PNC/ELC in the database record selected for programming the board;
- **Prog:** the progressive insertion number that identifies the database record selected for programming the board;
- **Service Kit Code:** the service kit code related to the spare board to configure;
- **Naked Board Code:** the code of the naked board (if any);
- **Naked Board Code From TDS:** the code of the naked board as specified in the TDS database (if any);
- **Naked Board Firmware:** is the firmware identification string in the board before the configuration step (if any);
- **MCF:** code and revision of the PNC parameters stored in the board. For Fabric Care and Dish Care appliances this field refers to the Machine Configuration File (MCF). For a Food Preparation board and this field shows a dummy string. For a Food Preservation board this field shows the configuration code and revision of the complete board;
- **CCF:** code and revision of the base model parameters stored in the board. For Fabric Care and Dish Care appliances it refers to the Cycle Configuration File (CCF). For Food Preparation

and Food Preservation boards this field shows the configuration code and revision of the complete board;

- **Configured Board Firmware:** For Fabric Care and Dish Care appliances this field shows the firmware identification string in the board after the configuration step. For Food Preparation and Food Preservation boards this field shows the configuration code (without revision) of the complete board;
- **Configured Board SN:** serial number stored in the configured board, if any. The serial number provides the date and time of the programming operation. It is a decimal number with the following format:

YYMMDDHHmm

YY programming year modulus 40 (0..39 => 39=2039, 00=2040)

MM programming month (01..12 => 01= January, 12=December)

DD programming day (01..31)

HH programming hour (00..23)

mm programming minute (00..59)

Example: 708081155 => this serial number indicates that the board has been programmed on the 8th August 2007 at 11.55 AM.

- **Algorithm Name:** the algorithm used for programming the board;
- **Communication Speed:** the actual communication speed (baud rate) employed for board programming;
- **Always Replace Firmware:** when this flag is ‘true’, the program always overwrites the firmware even when the same firmware is already present in the target board;
- **Skip Verify After Programming:** when this flag is ‘true’, the program skips the check of the operation after the board programming step.

Electrolux uses the programming log information both for collecting data that is useful for improving the quality of products and for troubleshooting problems that you may experience while programming electronic boards.

The software uploads the programming log to the central Sidekick server each time you execute an Update operation. Programming log records are removed from your local PC after each update operation if they are older than a specified period called “programming log retention time”. The programming log retention time is typically 30 days.

The **Verify Only** option allows you checking for the correct configuration of an already configured board. When this option is set, SidekickPC verifies for proper configuration rather than programming the board. This verification has 100% coverage of memory locations.

The **Spare Board Label** command in the Options menu shows the **Label** dialog box that allows the activation of label printing after each board programming operation:

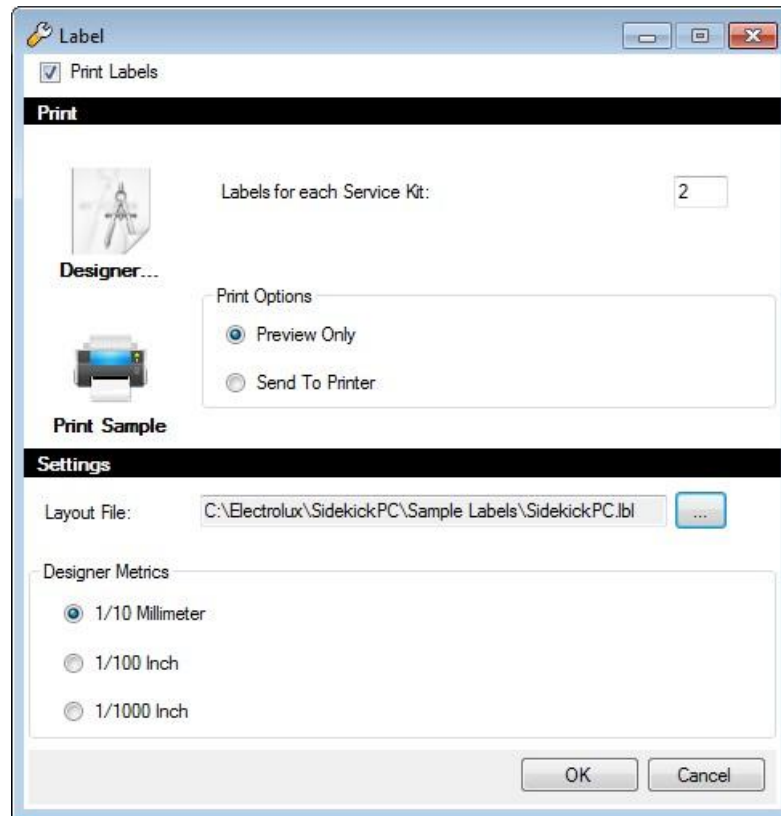


Fig. 38. Label Dialog

This dialog box allows you to:

- Print label** enable/disable printing one or more labels after the successful programming of each board.

Print section:

you can select how many identical labels to print for each board (the number is limited to 10 labels)



Print Sample lets you preview or print sample of the selected label, according to the Print Options selection.



Designer allows you entering the **Label Layout Designer**. With the Label Designer you can modify an existing layout, create a new layout from scratch, and print sample labels. This is a graphical editor that provides you with the full control over the label appearance and contents. The description of the layout Designer is outside the scope of this manual.

Settings section:

- **Layout File** field where you define the label layout by means of external files (*.lbl)
- **Designer Metrics** options allow you to specify the units of measure the editor displays.

The following is an example of label that you obtain after that you program a board for Fabric Care or Dish Care appliances:

973 914 525 706 00/3
00-07-132474080.000-132620470.021-WEC20306.000
ID = 1204101358 created with SidekickPC 3.0.0.0

Fig. 39. Label Example – Fabric Care or Dish Care

As you can see, the label shows all identification data regarding the spare part, appliance model, and database record used for the configuration:

973 914 525 706 00/3 is the Service Kit Code formatted for better readability;

00-07-132474080.000-132620470.021-WEC20306.000 indicates which database record has been used for programming the spare part or upgrading the appliance configuration. Each piece of information is separated from the following one by a hyphen. In the above example, from left to right, the meaning of the various fields is the following one:

00: ELC field in the selected record. Sometimes the ELC field may be different from the ELC that the Service Kit Code specifies;

07: Progressive Number field (Prog) in the selected record;

132474080.000: code and revision of the PNC parameters (machine configuration file for Fabric Care appliances) programmed in the configured board;

132620470.021: code and revision of the base model parameters (cycle configuration file for Fabric Care appliances) programmed in the configured board;

WEC20306.000: code and revision of the firmware programmed in the configured board;

SN = 1204101358 created with SidekickPC 3.0.0.0 shows the serial number stored in the programmed board (if any). The meaning and format of the serial number has been previously described in this chapter, in the section that deals with the programming log.

The following couple of figures show examples of label obtained after the configuration of Food Preparation and Food Preservation boards.

973 925 781 831 01/1
01-01-242569409.000-242569409.000-242569409.000
ID = 1204161724 created with SidekickPC 3.0.0.0

Fig. 40. Label Example – Food Preservation

The meaning of the first and third lines is the same as in the previous cases.

The second line has the following meaning.

01-01-242569409.000--242569409.000-242569409.000 indicates which database record has been used for programming the spare part or upgrading the appliance configuration. Each piece of information is separated from the following one by a hyphen. In the above example, from left to right, the meaning of the various fields is the following one:

01: ELC field in the selected record. Sometimes the ELC field may be different from the ELC that the Service Kit Code specifies;

01: Progressive Number field (Prog) in the selected record;

242569409.000: code and revision of the complete configuration, that corresponds to the PNC parameters code and revision;

242569409.000: code and revision of the complete configuration, that corresponds to the base model parameters code and revision;

242569409.000: code and revision of the complete configuration, that corresponds to the firmware code and revision.

973 944 185 788 00/9
00-1-HOTSW.000-387907400.000-387907400.000
ID = 1204161758 created with SidekickPC 3.0.0.0

Fig. 41. Label Example – Food Preparation

The meaning of the first and third lines is the same as in the previous case.

The second line has the following meaning.

00-1-HOTSW.000-387907400.000-387907400.000 indicates which database record has been used for programming the spare part or upgrading the appliance configuration. Each piece of

information is separated from the following one by a hyphen. In the above example, from left to right, the meaning of the various fields is the following one:

00: ELC field in the selected record. Sometimes the ELC field may be different from the ELC that the Service Kit Code specifies;

1: Progressive Number field (Prog) in the selected record;

HOTSW.000: dummy string that indicates which type of board has been configured;

387907400.000: code and revision of the complete configuration, that corresponds to the base model parameters code and revision;

387907400.000: code and revision of the complete configuration, that corresponds to the firmware code and revision.

3.3.2. Printing Extended Information in the label

It is possible to print extended information in the label(s) that the software is able to print after each board configuration.

Normally SidekickPC prints 3 lines of text.

By activating the **Print Extended Information** option in the Configuration Form, you can print additional information that you can enter before programming each board. In this case, if you use the proper label layout file (*.LBL), SidekickPC prints 4 lines of text.

This function is useful in all situations where the Service Kit Code is not used to identify the configured spare board. This is true for some geographical areas outside Europe. In this case you can manually specify the code to be printed on the label before programming each board.

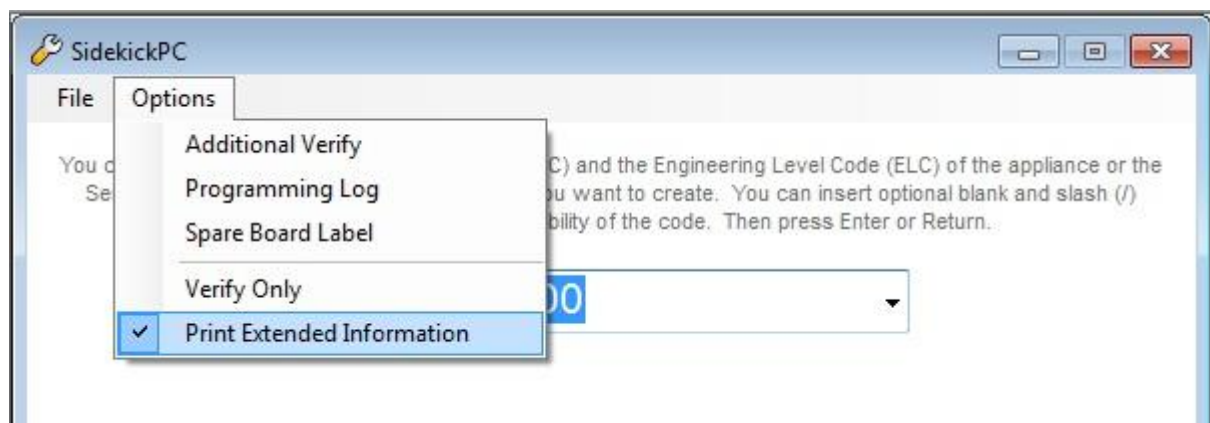


Fig. 42. Print Extended Information Option

If you quit SidekickPC and enter again, the software restores the state of the **Print Extended Information** option from the previous session (this option is persistent).

Please remember to choose a proper label layout file. In order to print all information, it is necessary that the selected label layout file refers to all 4 “Variables” that are available from within the Label Layout Designer. The figure below highlights these variables:

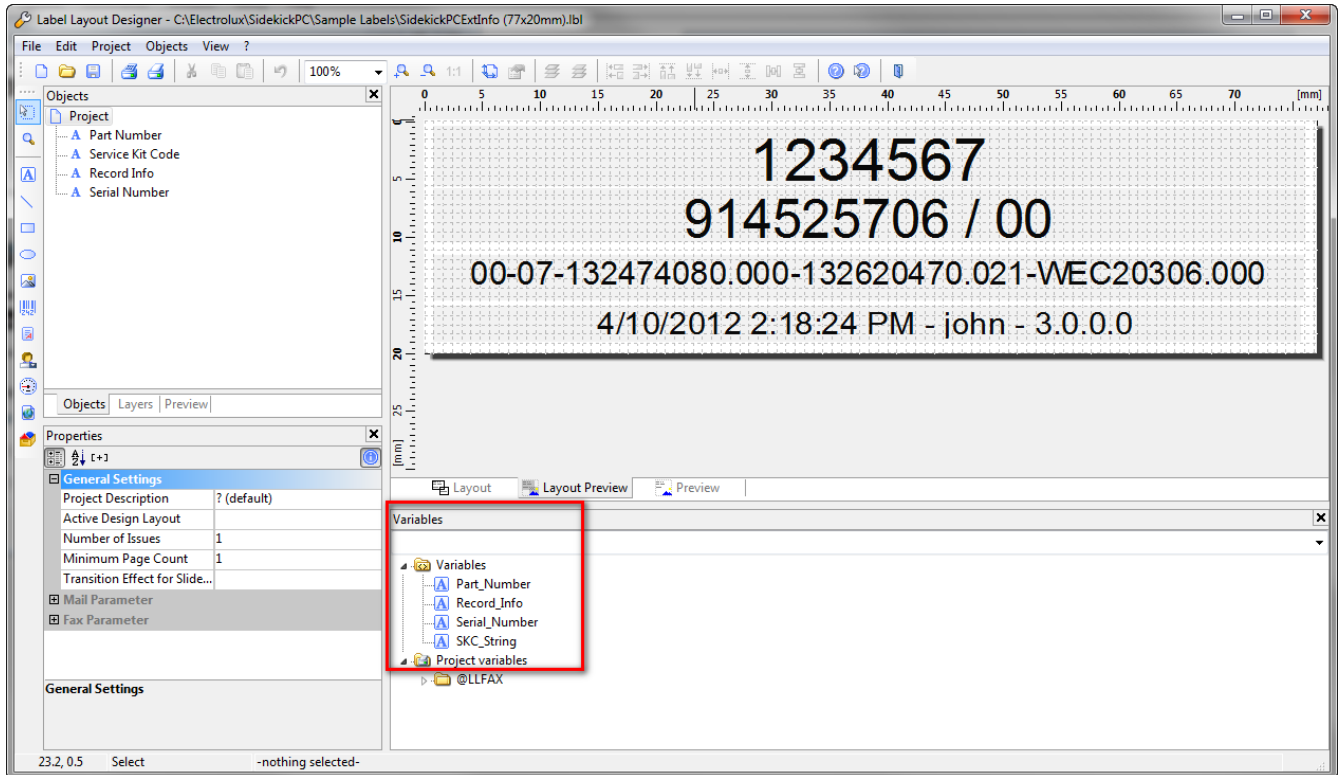


Fig. 43. Label Layout Designer Variables

The **Part Number** variable displays the part number as entered by the operator, as explained later in this section.

You can however start from one of the provided samples that support extended information:

1. SidekickPCExtInfo (77x20mm).lbl
2. SidekickPCExtInfo (77x25mm).lbl

Even if you start from one of the above samples, you must open the Layout Designer and adjust the label settings to your actual printer.

You can do that by means of the **Page Setup** command that you can find in the **Projects** menu. This command opens the **Layout** dialog box.

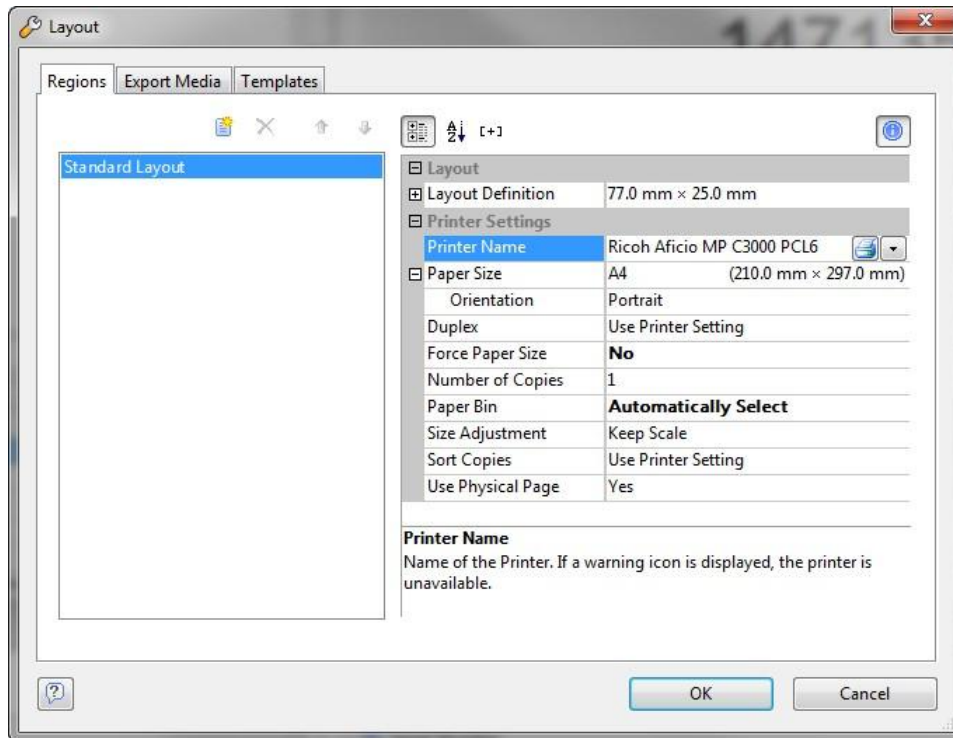




Fig. 44. Label Layout Designer Dialog box

This dialog box provides the **Printer Settings** section where you can select the **PrinterName**  .

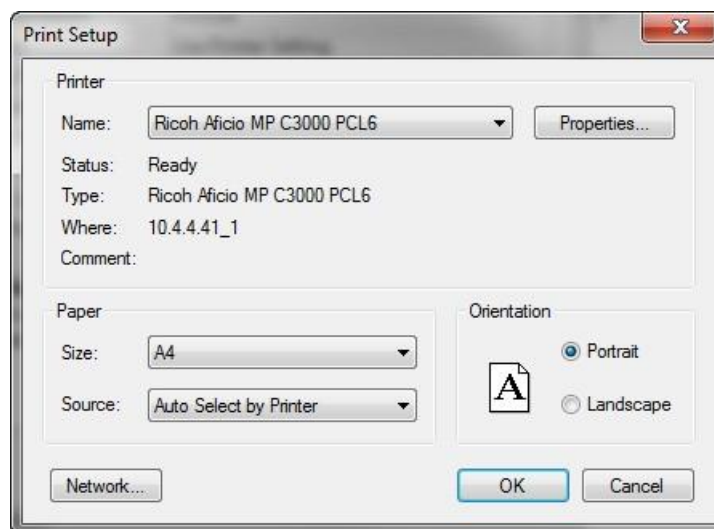


Fig. 45. Printer Selection

Please remember to adjust margins and actual sizes of the label.

Expand **Layout Definition** and select the highlighted icon in the dialog box:

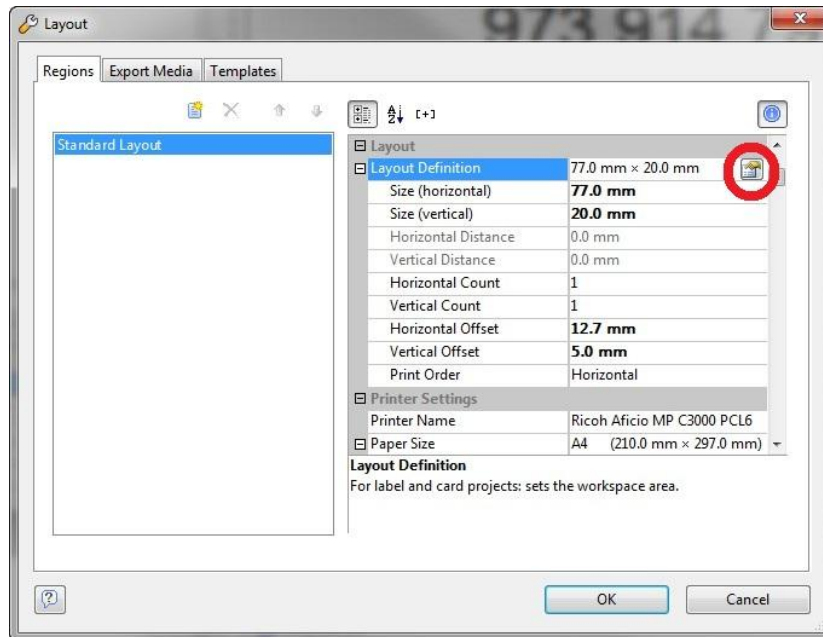


Fig. 46. Label Layout definition

The previous action opens the **Page Setup** dialog box:

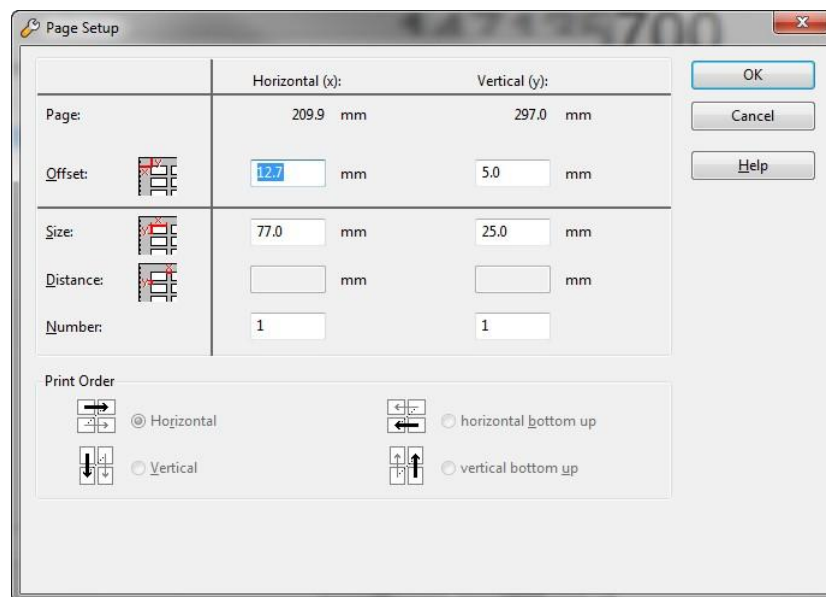


Fig. 47. Page Setup

When this option is enabled, the board programming operation consists in one step more. This step occurs just before the actual start of programming.

After that you specify the quantity, you can enter also the name of the operator and the part number. This figure shows the new text entry controls:

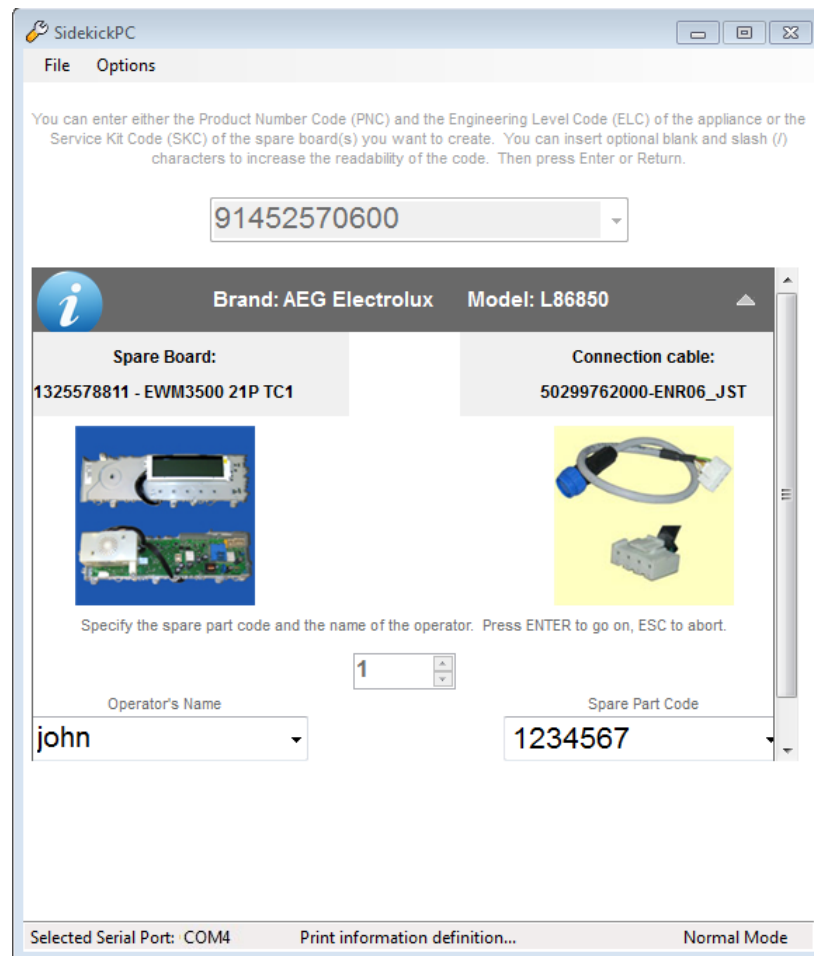


Fig. 48. Extended Information Controls

Both **Operator's Name** and the **Spare Part Code** are options that are persistent between one session of SidekickPC and the next one.

The software stores the last 5 settings of these options. You can choose the most recent values from the corresponding list.

The function is devised in order to minimize data insertion efforts for the operator. After you specify the quantity, the focus moves automatically to the Spare Part Code, because it is more likely necessary to change it with respect to the Operator's Name.

The following is an example of an extended information label that you can obtain starting from one of the sample LBL files that SidekickPC supplies:

1234567
914525706 / 00
00-07-132474080.000-132620470.021-WEC20306.000
4/10/2012 1:51:25 PM - john - 3.0.0.0

Fig. 49. Extended Information Label Example

The meaning of the above information is the following:

1234567 is the manually inserted code;

914525706/00 is the PNC/ELC;

00-07-132474080.000-132620470.021-WEC20306.000 has the same meaning as in the normal label described in the previous paragraph;

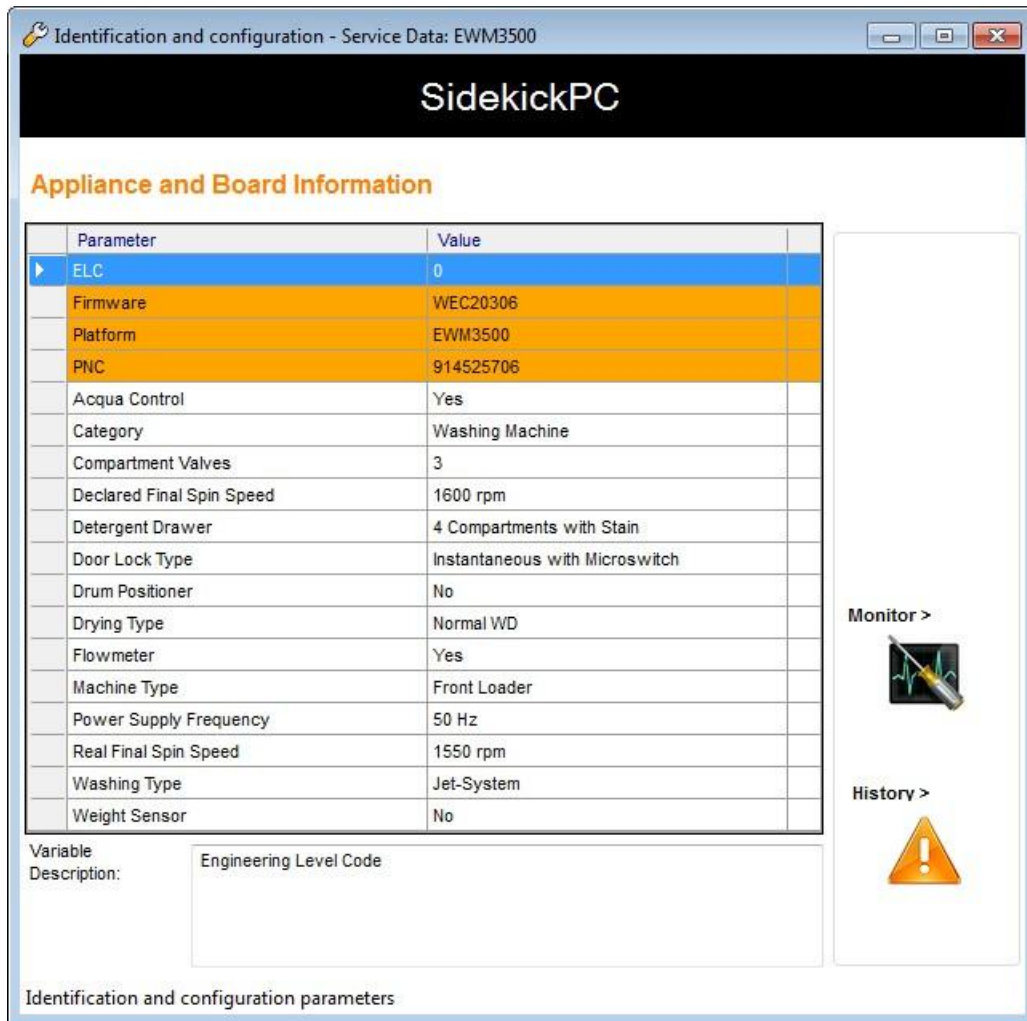
4/10/2012 1:51:25 PM indicates the date and time of the programming;

john is the manually inserted operator's name;

3.0.0.0 is the version of SidekickPC.

3.4. Identification Form

This is the form that appears you when press the **Diagnostic** button in the Startup form just after the software successfully connects to the appliance and identifies it.



Identification and configuration - Service Data: EWM3500

SidekickPC


Appliance and Board Information

Parameter	Value
ELC	0
Firmware	WEC20306
Platform	EWM3500
PNC	914525706
Acqua Control	Yes
Category	Washing Machine
Compartment Valves	3
Declared Final Spin Speed	1600 rpm
Detergent Drawer	4 Compartments with Stain
Door Lock Type	Instantaneous with Microswitch
Drum Positioner	No
Drying Type	Normal WD
Flowmeter	Yes
Machine Type	Front Loader
Power Supply Frequency	50 Hz
Real Final Spin Speed	1550 rpm
Washing Type	Jet-System
Weight Sensor	No

Variable Description: Engineering Level Code

Identification and configuration parameters

Monitor >



History >




Fig. 50. Identification Form

The title bar of this form shows the Service Data set that has been selected for the appliance under test. Service Data provide all information that is necessary for appliance diagnosis activities. Such information is associated to families of products (platforms), not to single appliance models. SidekickPC automatically associates the correct service data to use for diagnostic operations after it properly identifies the appliance.

This panel has three main groups of items.

The **Appliance and Board Information** group provides information about the current appliance (platform, PNC/ELC if known, firmware ID, board type), its main features and configuration. Items in orange background show appliance identification parameters. Items in white background show appliance configuration data.



The **History** command opens the History Form. This icon is not active if the database does not specify any history reference information for the connected appliance.



The **Monitor** command opens the Monitor Form.

If you want a detailed description about each parameter in the **Variable Description** box, just select the corresponding item in the above list.

3.5. History Form

The History form provides information about the device usage history stored in the non-volatile memory of the appliance.

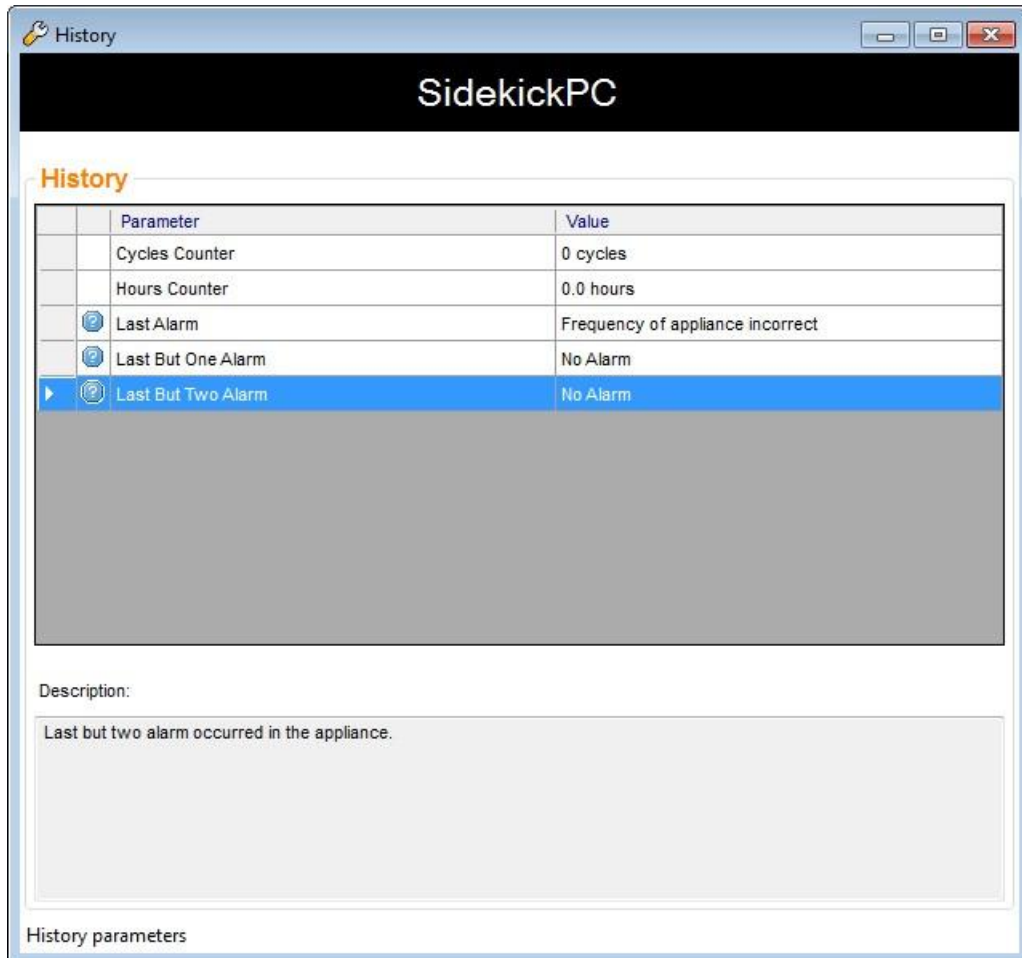


Fig. 51. History Form

At the top of History form you can see a list that shows the history information. To see the detailed description of each parameter in the **Description** textbox, just select the corresponding item in the above list.

The actual items listed in the list depend on the appliance model and local database contents.

3.6. Monitor Form

The Monitor form allows you watching appliance parameters and run the tests.

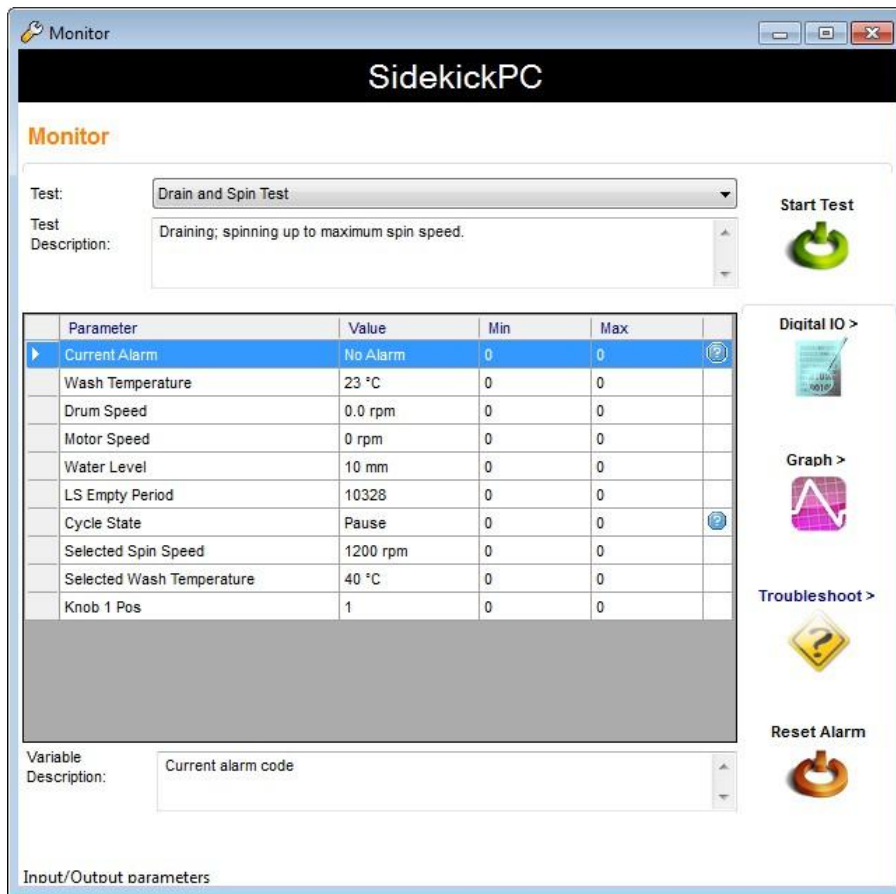


Fig. 52. Monitor Form

At the top there is the **Test** selection list with all tests for the connected appliance.



Start test: In order to start a test, just select an item from the list and click the icon. When a test is in progress, the same icon becomes red (Stop test)



Stop test. In this case, you can click the icon to stop the current test and, usually, reset the appliance.

Test Description provides a short description about the selected test (if any).

In the middle of the Monitor form there is a list of variables that provide meaningful information during the tests. In this list you can see the current values of the parameters as reported by the electronic controller(s) in the appliance. Please note that SidekickPC highlights all items whose values are outside the minimum/maximum limits in red. The program usually updates these values every

second. To see the detailed description of the variable in the **Variable Description** field, just select it by clicking the corresponding item.



With the **Digital I/O** command you enter the Digital I/O form that displays the current state of the digital inputs and outputs in the appliance.



With the **Graph** command you enter the Graph form that shows you some parameters in graphical form.



Troubleshoot shows the list of troubleshooting procedures defined by the local database for the appliance under test (if any). For more information on the troubleshooting feature of SidekickPC, please refer to the next paragraph.



Reset Alarm resets the latest alarm(s) stored in the non-volatile memory of the electronic board. This command is only active if the local database defines a procedure to reset the last alarm. Please note that if one alarm is currently still active, you cannot clear the last stored alarm as it will be immediately set back again.

3.7. Troubleshooting Wizard

If the local database defines troubleshooting procedures for the appliance under test, the software is able to guide you step-by-step to the resolution of the fault, starting from the alarm code.

A troubleshooting procedure is a sequence of interactive dialog boxes.

When there is an alarm condition and the software detects that one troubleshooting procedure is associated to that alarm, the **Troubleshoot** icon in the Monitor form becomes red:

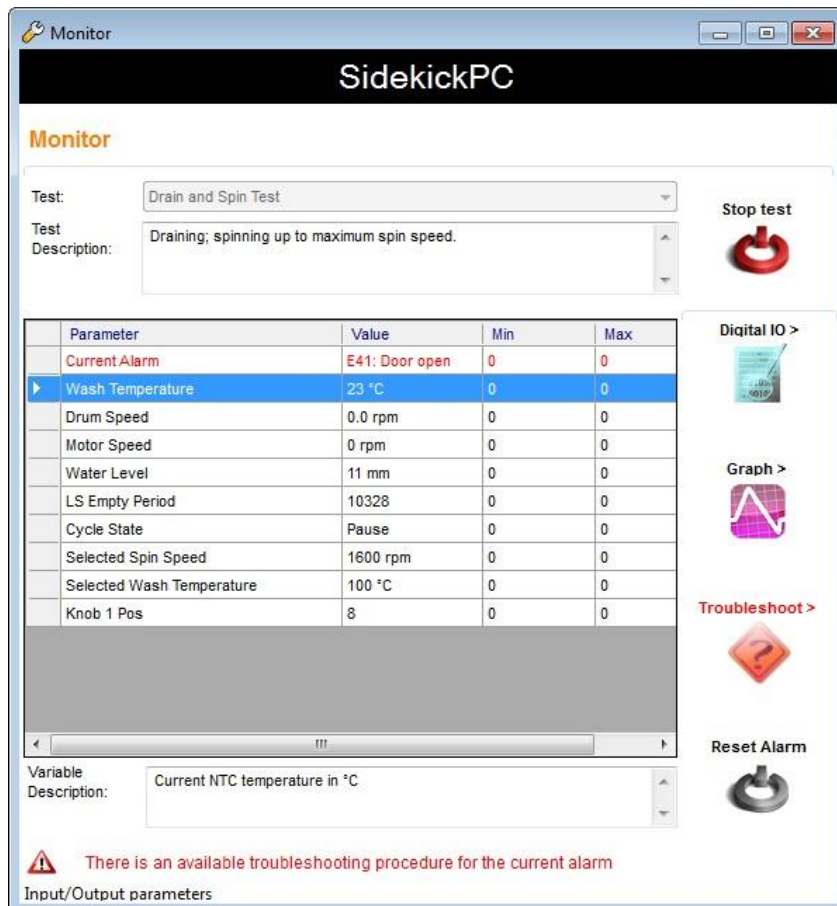


Fig. 53. Available Troubleshooting Procedure

If you click the Troubleshoot icon you can see the **Troubleshooting List** dialog:

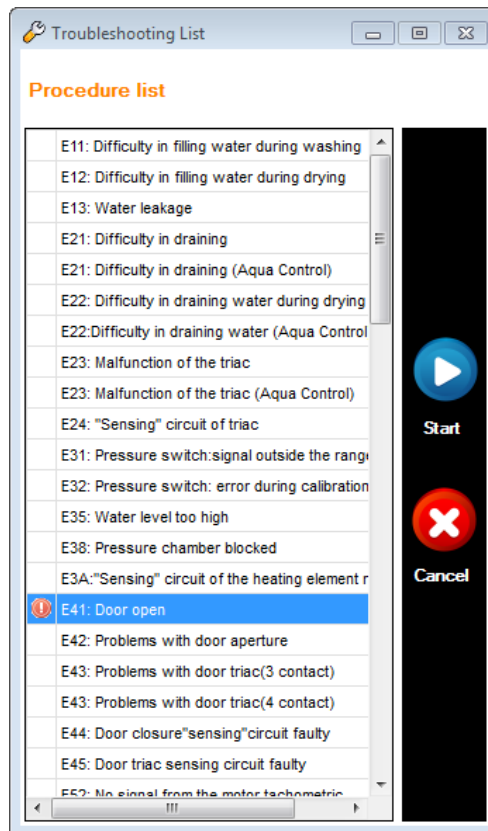



Fig. 54. Troubleshooting List

This dialog shows the list of all available troubleshooting procedures in the database. All procedures that are related to the current alarm condition (if any) are highlighted in red. In order to start the Troubleshooting Wizard for a certain procedure, just select it from the list and click the  icon.

Each step consists in a dialog box that shows instructions and up to two images:

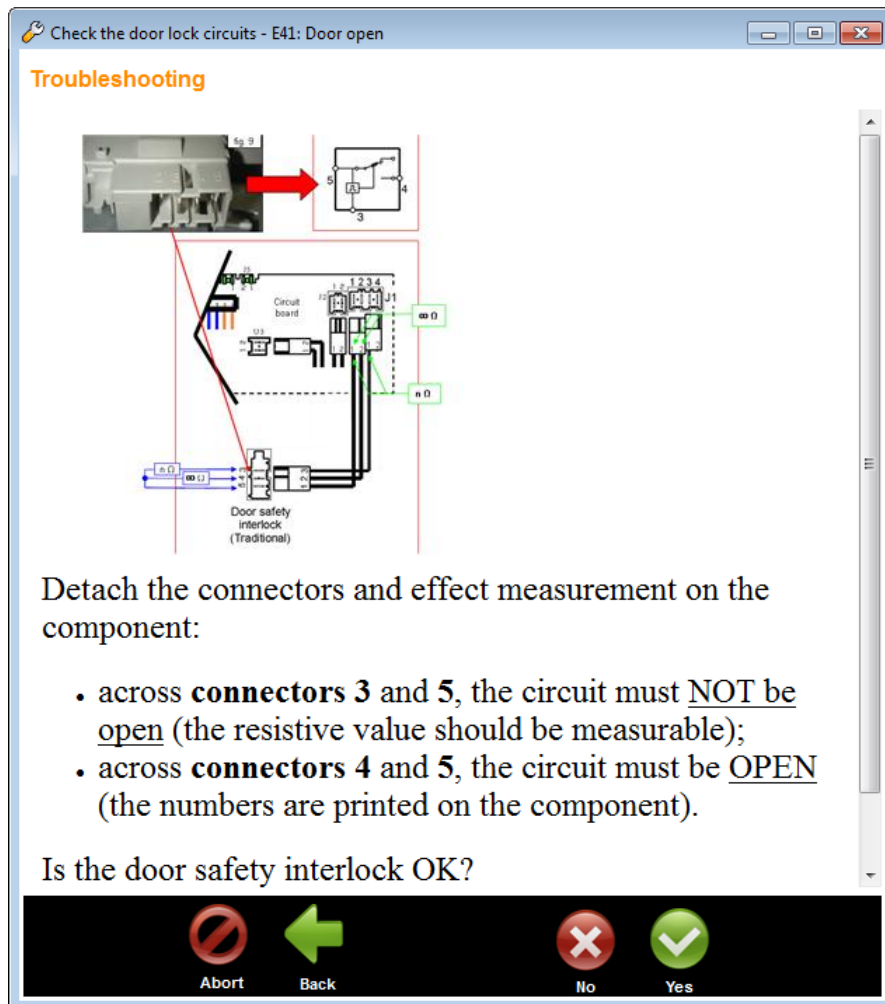


Fig. 55. Troubleshooting Wizard Step

The instructions provide information regarding the specific operation to execute. You should provide a result to the wizard in terms of a **Yes** or **No** answer. The next step, if any, depends on the answer you provide.

Troubleshooting steps either can be only manual or can involve the interaction with the electronic board. The management of such interaction is completely automatic for the end user.

3.8. Graph Form

The Graph form shows the evolution of the appliance parameters in graphical form.

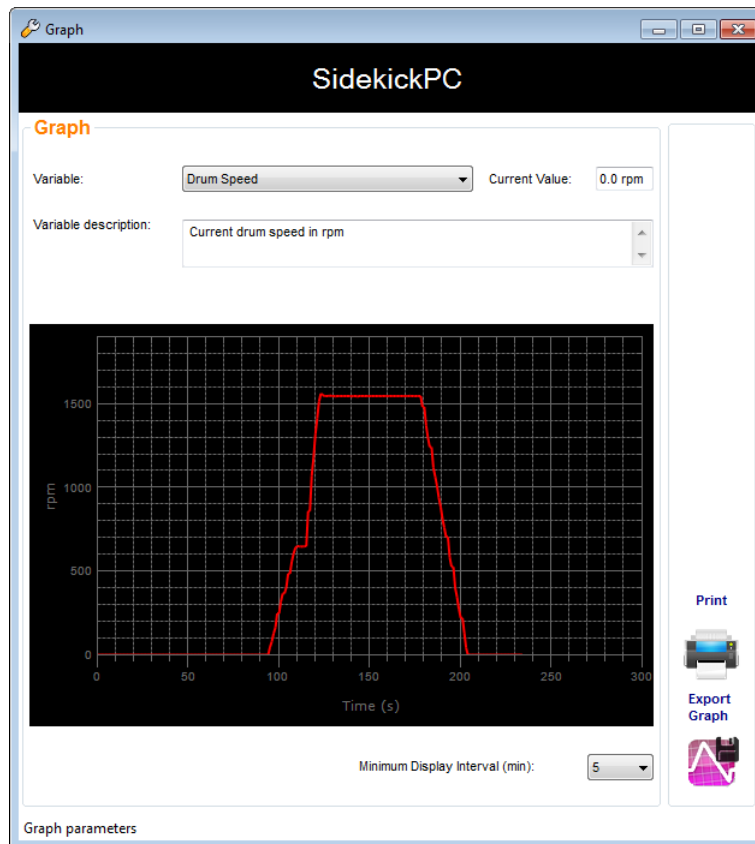



Fig. 56. Graph Form

To see the graphical representation of one appliance variable, you should choose it from the **Variable** selection field at the top of Graph Form. Click with the mouse the selection button () and choose the variable name. The detailed description of the variable appears in the **Variable description** field. In the **Current Value** field you can see the present value of the selected parameter.

The **Maximum Display Interval (min)** control allows you selecting the display width of the graph. The default interval is 1 min, but you can change it from 1 minute up to 5 hours. For each variable, the program reads a new data sample from the appliance every 1 second.



The **Print** command creates a hardcopy of the current graph.



The **Export Graph** command exports the current graph in one of the following image formats: BMP, GIF, JPG, PNG, and TIFF.

3.9. Digital I/O Form

The Digital I/O form displays the current state of the digital inputs and outputs in the appliance.

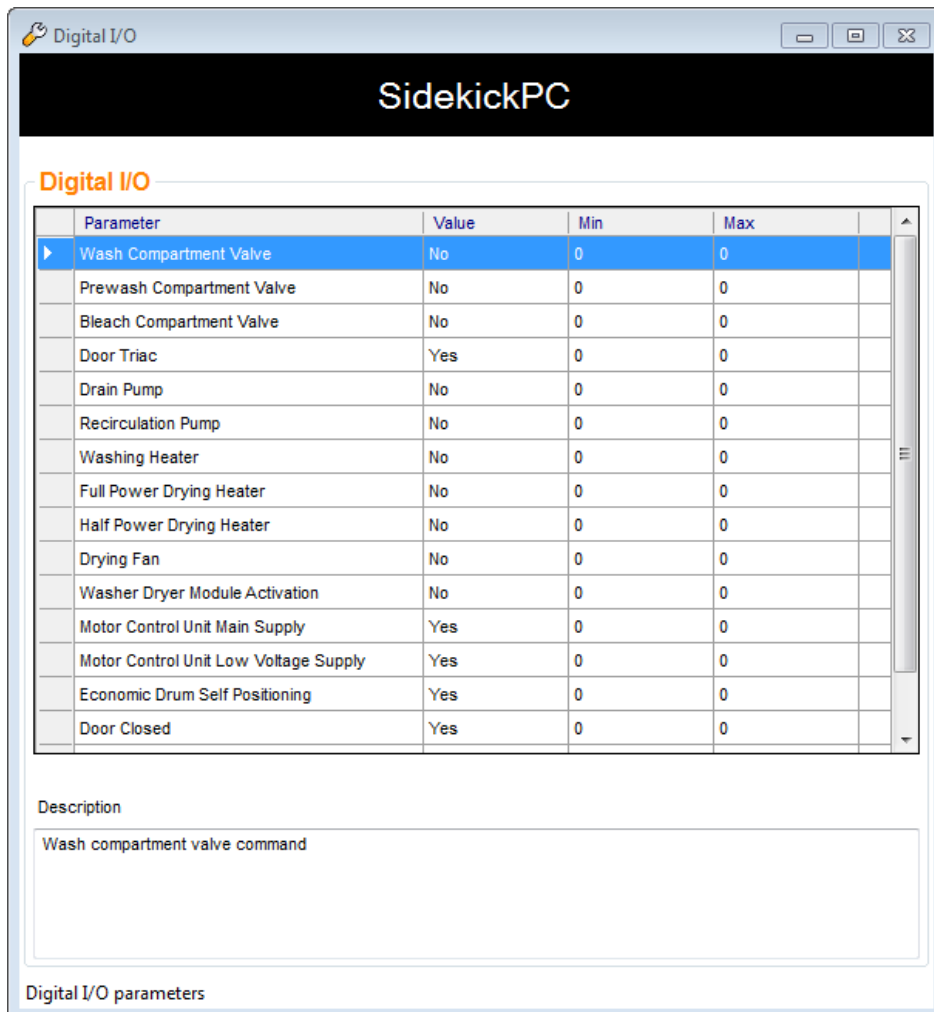


Fig. 57. Digital I/O Form

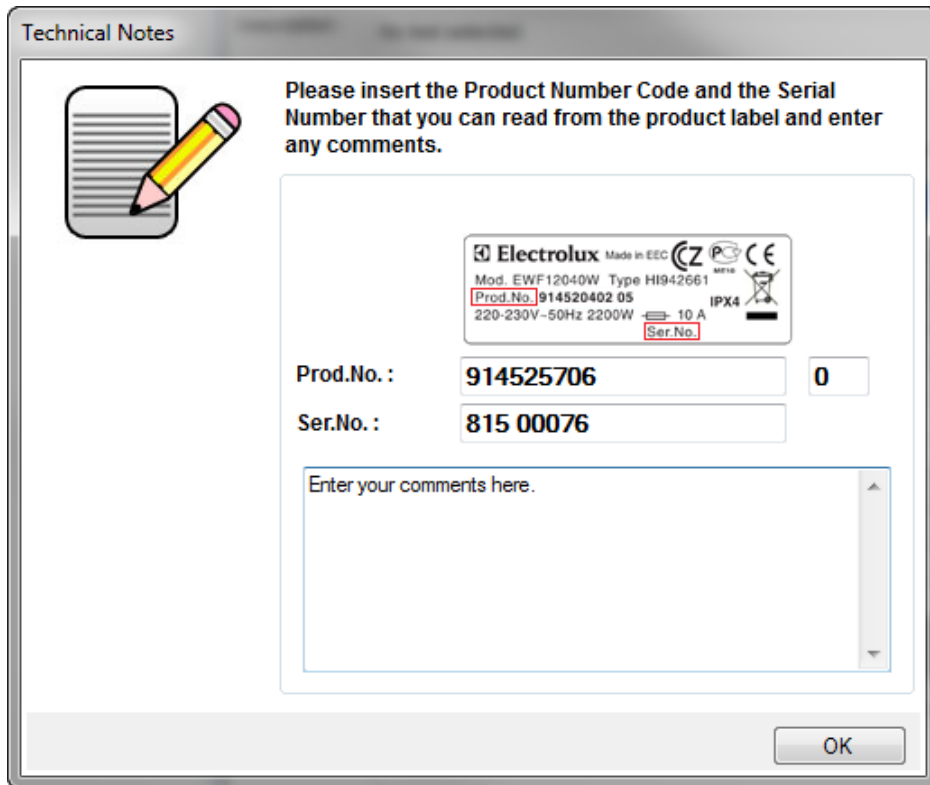
You can see a list of the digital inputs and outputs states that are meaningful during the diagnostic procedures. The program updates these values every second.

To see the detailed description of each parameter in the **Description**, just select the corresponding item in the list.

3.10. Technical Notes

Whenever you close the diagnostic session, the Technical Notes form lets you insert the PNC, ELC and Serial Number of the appliance as specified in the product label. In addition this form lets you insert any comments concerning the result of the test.,

The following figure shows the Technical Notes form:



Technical Notes

Please insert the Product Number Code and the Serial Number that you can read from the product label and enter any comments.

Mod. EWF12040W Type HI942661
Prod.No. 914520402 05
220-230V-50Hz 2200W 10 A
Ser.No.

Prod.No. :

Ser.No. :

Enter your comments here.

OK

Fig. 58. Technical Notes Form

The information you insert in this form allows Electrolux tracking the results of all diagnostic sessions that you perform with SidekickPC. For this reason you are strongly encouraged to insert correct information.

3.11. Diagnostic procedure for Cooking Appliances

The cooking appliances supported by the system are:

- Oven
- Induction hob
- Radiant hob

When you start a diagnostic session on these appliances, the software performs the following preliminary steps:



- Detection of all boards attached to the appliance communication bus (all boards communicate each other on the same bus by means of a protocol called MACS)
- Identification of the corresponding detected board codes

The boards of cooking appliances are identified by an Identifier code (Board ID) and a description or Unit Type as the following table shows:

Board ID	Unit Type
HC1	hob controller 1
HC2	hob controller 2
HC3	hob controller 3
OC1	oven controller 1
OC2	oven controller 2
OC3	oven controller 3
PD1	pot detection 1
PD2	pot detection 2
SC1	smart controller 1 (*)
SC2	smart controller 2 (*)
HUI1	hob user interface 1
HUI2	hob user interface 2
HUI3	hob user interface 3
OUI1	oven user interface 1
OUI2	oven user interface 2

(*) Smart Controller boards for the moment are not Sidekick-enabled.

During the detection, all boards could be marked in one of the following ways:

- To Detect
-  Detected
-  Not Responding
- Not Sidekick Enabled

Below the form that describes the process. After that each step completed press **Next** to continue or **Cancel** to abort the operation.

If you select the ‘**Continue automatically to next operation**’ option on the bottom of the dialog box, the application passes to the next step automatically when the operation completes.

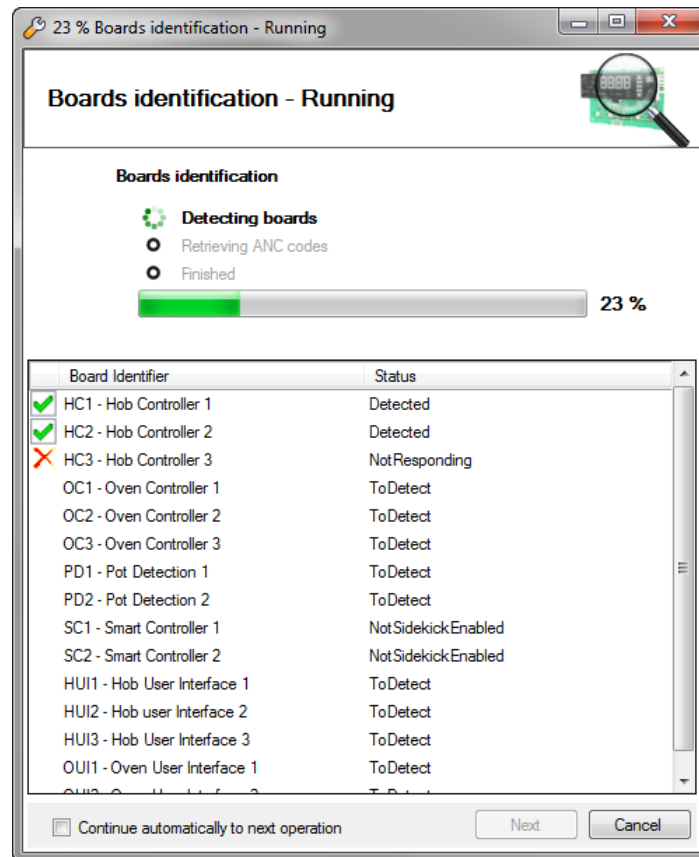



Fig. 59. Cooking: board detection step

For all the boards marked as detected , after clicking to Next button automatically the software gets from the board all the necessary information for the identification as the Firmware and Parameters ANC (Article Number Code) codes and the hardware ID string (HW_ID) that identifies the hardware of the board.

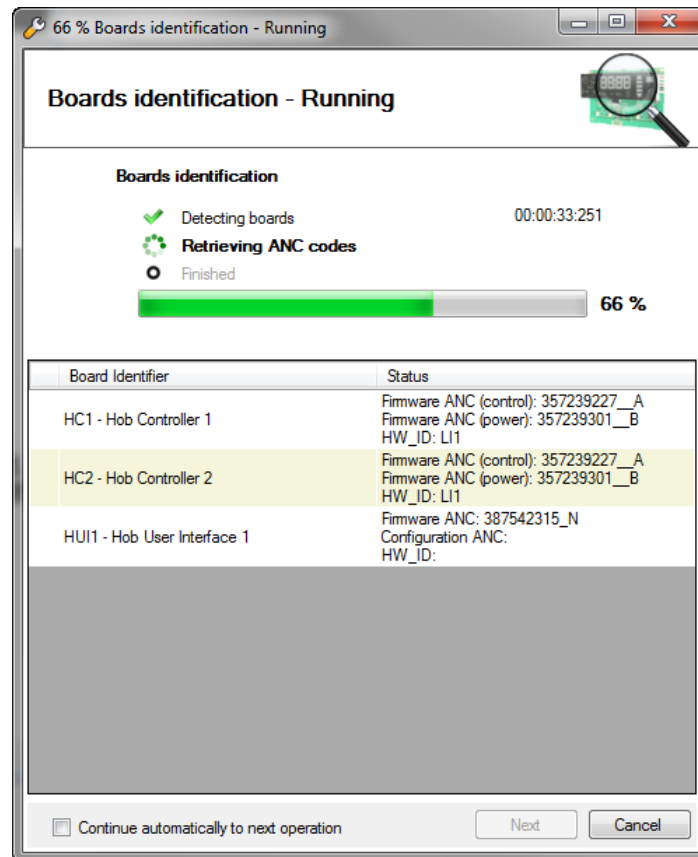


Fig. 60. Cooking: ANC retrieval step

When system identification is done, the software retrieves the loads configuration in order to show the correct loads in the tests list:

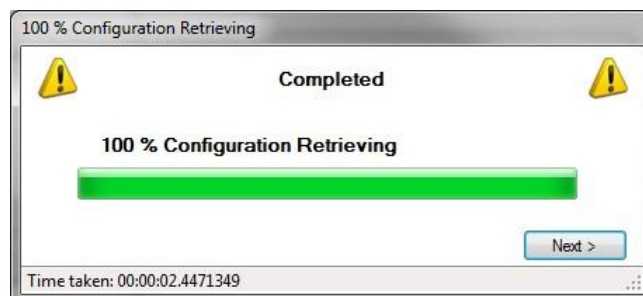


Fig. 61. Cooking: Configuration Retrieving step

If an Induction Hob is connected a further a dialog box that asks to proceed with **Data Flash Reading** is shown:

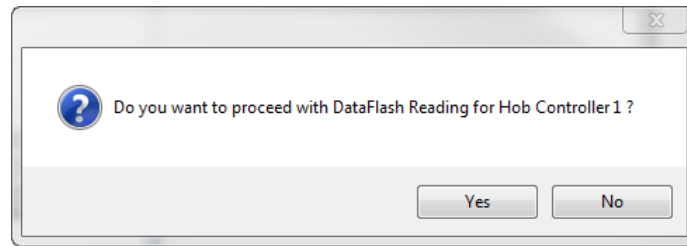


Fig. 62. Cooking: Data Flash reading

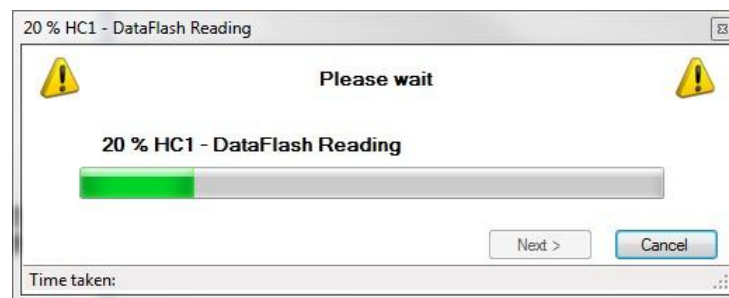


Fig. 63. Cooking: Data Flash reading

This process might take several minutes.

This operation is repeated for each hob controller in the appliance.

DataFlash Reading is an optional step, reserved only for Induction Hob appliances, and requested by the engineering of the Food Preparation that collects additional information regarding the usage history of the induction hob. DataFlash stores the “black box” of the induction hob controller consisting in relatively large data structures. These data structures are then translated into textual format and appended to the log file preceded by the corresponding header.

DataFlash Reading may be required in order to let Electrolux engineering departments perform detailed investigations on the most significant events occurred during the lifecycle of the controller.

The software continues then with monitoring.

Identification and Monitor form shows, for each item, a new “Board Name” column that contains the Board Identifier of the unit from which that information comes. To highlight the parameters coming from different boards, the rows color is alternating in all grids.

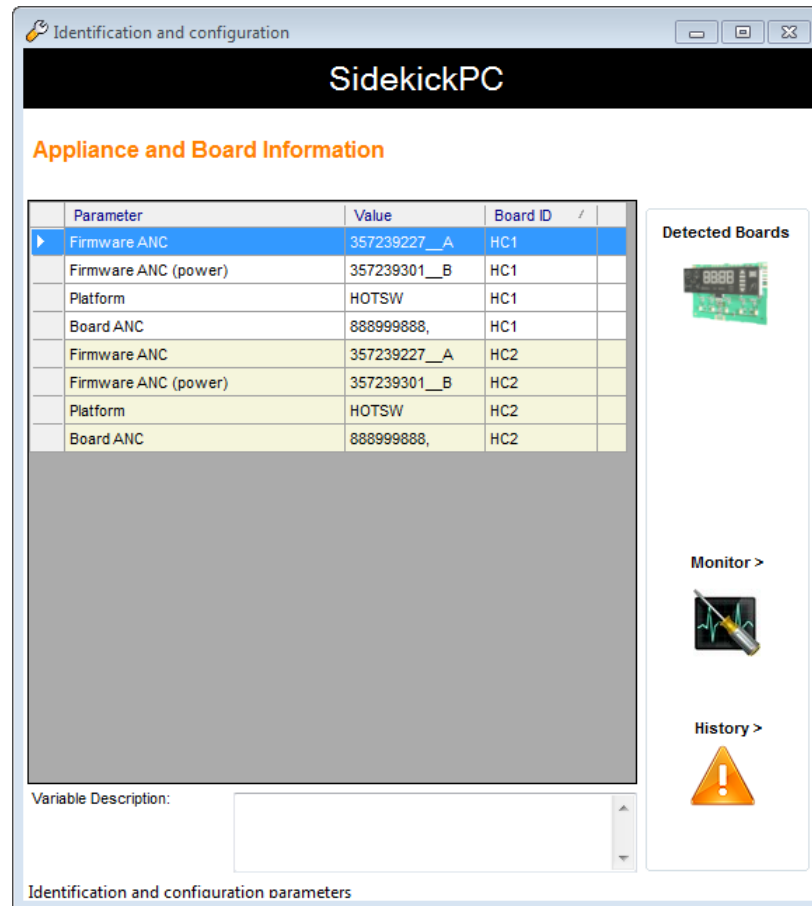


Fig. 64. Cooking: Identification form

Regarding cooking appliances, for each PNC/ELC, it is defined a Board ANC code of all configurable boards.

The form Identification will show a summary of the board identification with corresponding Board ANC code (code that identifies the configurable board) and Platform.



The **Detected Boards** command opens a new dialog box containing, for each detected board, the following details:

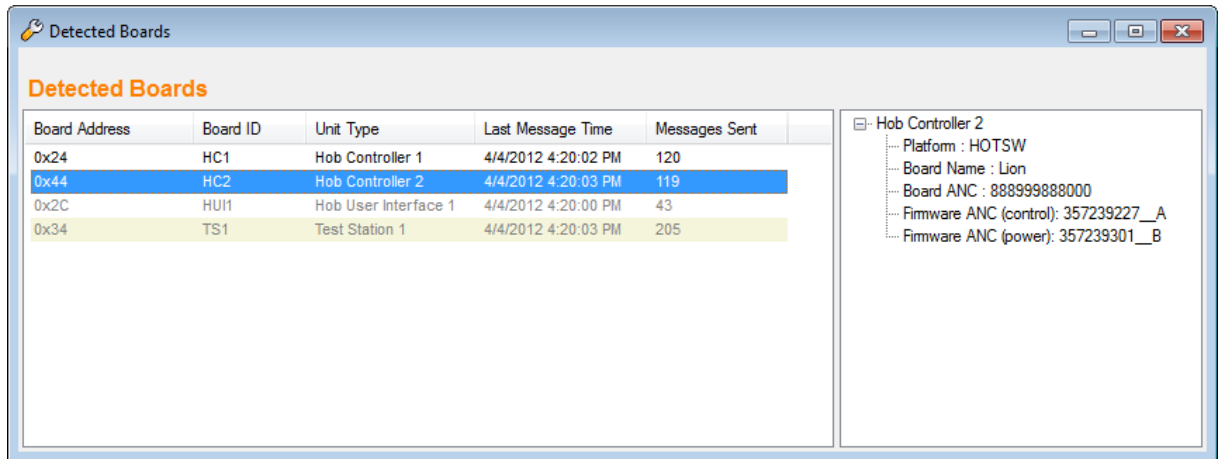


Fig. 65. Cooking: Detected Boards form

- **Board Address:** the MACS address assigned to each board in hexadecimal representation (boards or units are identified on the MACS communication bus by an address)
- **Board ID:** identifier code of the board (e.g., HC1, HC2, OC1, ...)
- **Unit Type:** description associated to the Board ID (e.g. Hob Controller 1, Oven Controller 1, ...)
- **Last Message Time:** date/time of the last message received from that unit
- **Messages Sent:** total number of messages received from that unit


For each Unit Type selected are shown:

- **Platform:** for cooking appliances only 2 platforms are actually defined:
 - HOTSWCFG (HOT platform for firmware and configuration)
 - HOTSW (HOT platform for firmware)
- **Board Name:** name of the board retrieved from SidekickPC database (or service data associated)
- **Board ANC/REV:** SW_ANCE code that identifies the board configuration recipe
- **Firmware ANC/REV:** ANCE/REV code of the firmware programmed into the microcontroller of the board.

N.B. Some boards (induction hobs) are provided with 2 micro-controllers of which only one is connected to the MACS bus (“control micro”) and another “power micro” devoted to other function. In this case the dialog box shows shown both control and power firmware ANC/REV codes.

- **Configuration ANC/REV:** ANC/REV code of the parameters, if any

The PC station (SidekickPC) to retrieve and monitor the information has the same behavior as a unit on the communication bus. **TS1** is the identifier reserved to the PC station running SidekickPC application.

 The **History** command opens dialog box below and the alarms retrieving operation is executed. The software communicating with the designated UI board by means of specific message retrieves information about the latest 5 alarms of the appliance (stored on the OUI1 or HUI1 of the appliance).

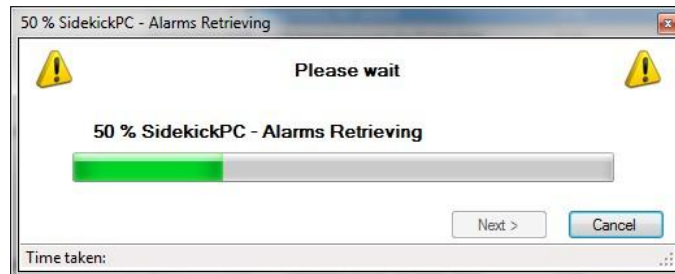


Fig. 66. Cooking: Alarms Retrieving Form

When the operation is complete and you click the **Next** button, the following pieces of information about each alarm are shown:

- Description of the alarm
- Alarm Code (hexadecimal format)
- Board ID name from which alarm is received. If the alarm is a “system alarm” the Board ID column is set to **ALL**.

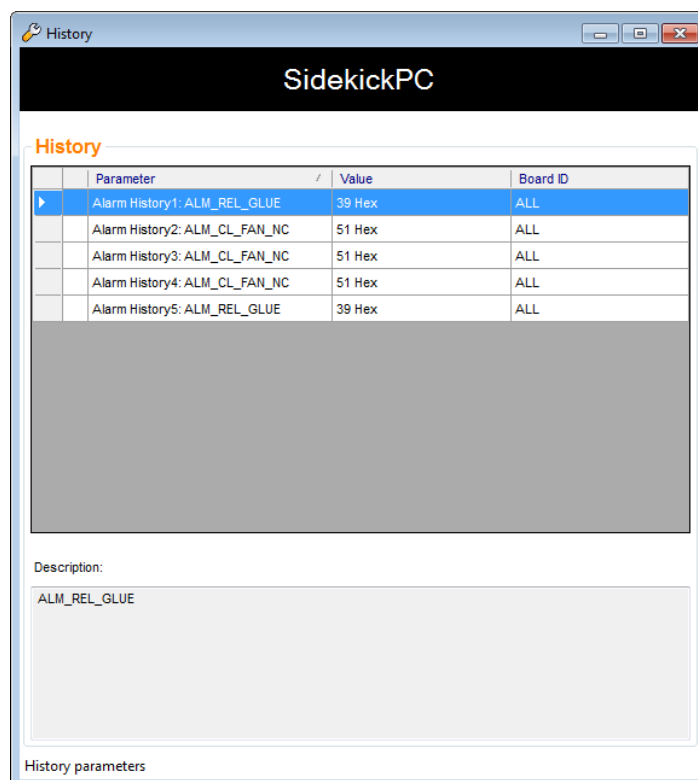


Fig. 67. Cooking: History Form

3.11.1. Monitor

The Monitor form allows you watching monitored parameters and testing of loads detected on the connected appliance.

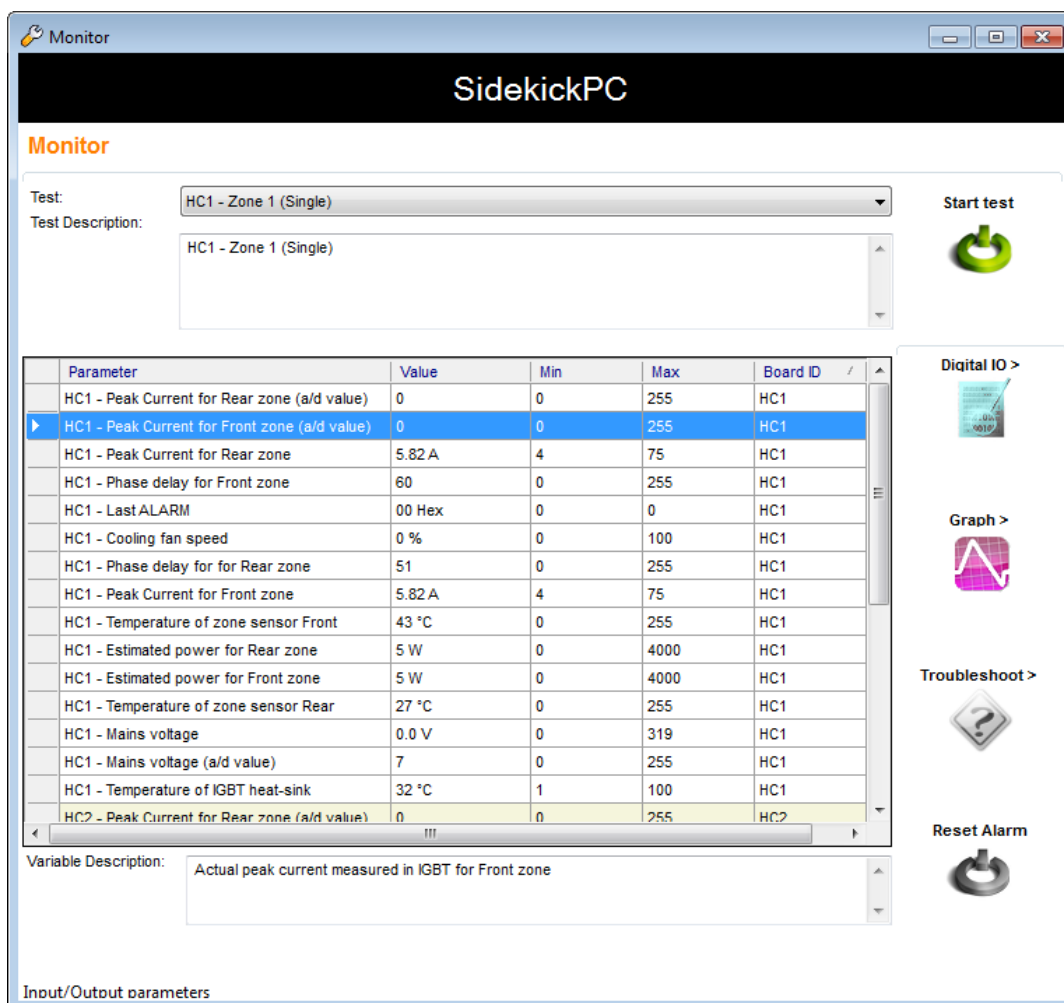


Fig. 68. Cooking: Monitor form

At the top there is the **Test** selection list with all available loads for the connected appliance.



In order to activate a load, just select the desired load from the list and click the **Start Test** icon. When a test is in progress, the same icon becomes red.



Stop Test you can click the icon to switch OFF the load.

WARNING: The test can be limited to individual loads. It is important to know that there are no time activation constraints in which a load can be active; this means that, as an example, there's no need to

explicitly activate the cooling fan in order to activate an heating zone, so keep in mind that there is no safety control in case of over-temperature or overflow of the maximum allowed power.

Depending on the type of cooking appliance connected there are different naming conventions regarding test description:

Test Description for Induction Hobs : due to different interpretation of hob configuration, the software cannot show description such a “Front zone” or “Rear zone”, but SidekickPC shows only “**Zone 0**” or “**Zone 1**” and let the user check the wirings inside the hob and understand which zone is being used. All zones are preceded by the Board ID of the corresponding unit.

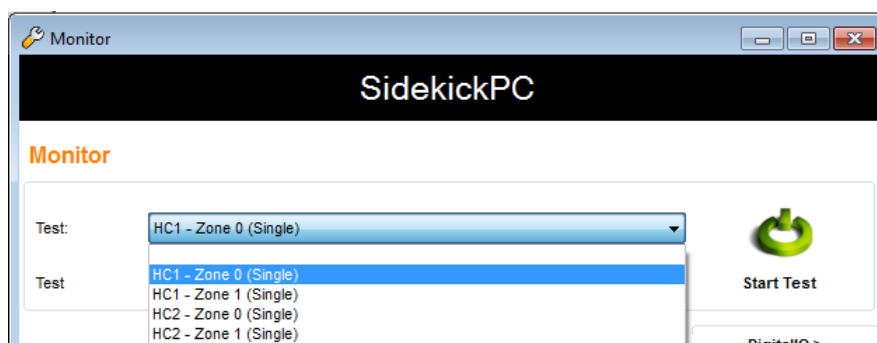


Fig. 69. Cooking: Monitor form

Test Description for Radiant Hobs: for the same different interpretation of radiant hob configuration, the software shows the test description in the following way:

REL_Zx_y :

- **x** can be a value in the range [1,6] and represent zone x
- **y** can be S, D or T (Single, Double or Triple) and represent the type of configuration

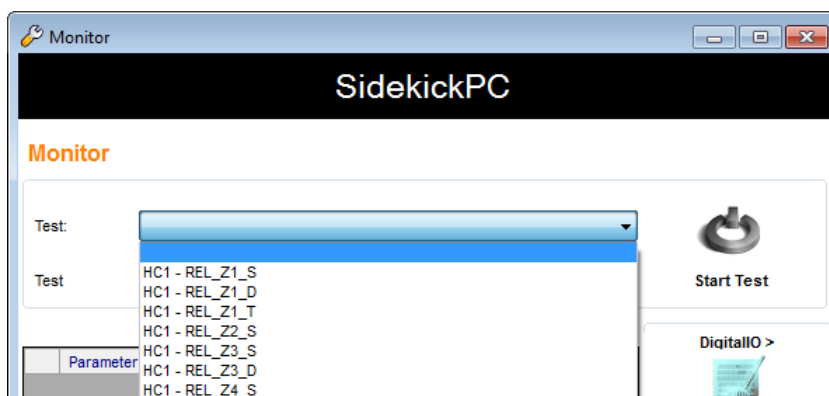


Fig. 70. Cooking: Monitor form

Test Description for Ovens: in this case the test naming convention is the following:

Board Id - CAVITY Load_ACT_POS where:

- Board Id
- CAVITY can be FIRST or SECOND and represent the cavity to which the load is connected (depending on current oven system- single or double cavity system)
- Load_ACT_POS

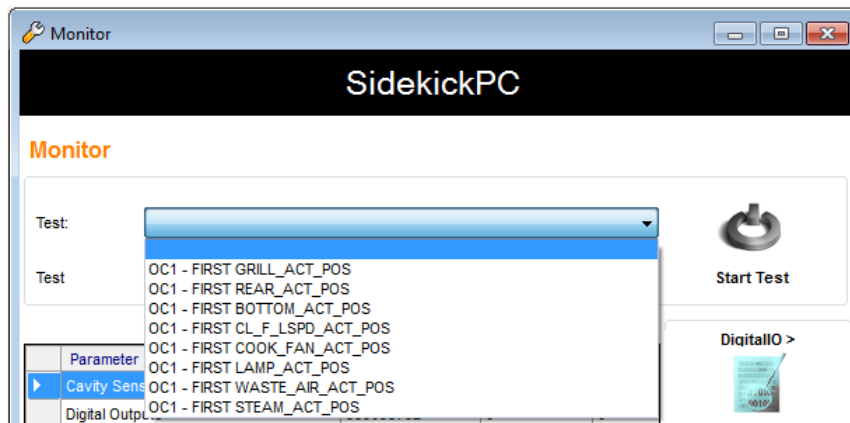


Fig. 71. Cooking: Monitor form

In the middle of the Monitor form there is a list of parameters that provide meaningful information during the tests. In this list you can see the current values of the parameters. Please note that SidekickPC displays all items whose values are outside the minimum/maximum limits in red. The monitoring is achieved either by sending commands or by sniffing messages in the communication bus. To see the detailed description of the variable in the **Variable Description** field, just select it by clicking the corresponding item.

The **Graph** button allows you to enter the Graph form that shows you some parameters in graphical form.

The **Reset Alarm** button is always disabled because this function is not implemented in cooking appliances.

The **Troubleshoot** button shows the list of troubleshooting procedures defined by the local database for the appliance under test (if any).

The **Digital I/O** button allows you entering the Digital I/O form that displays the current state of the digital inputs and outputs in the appliance.

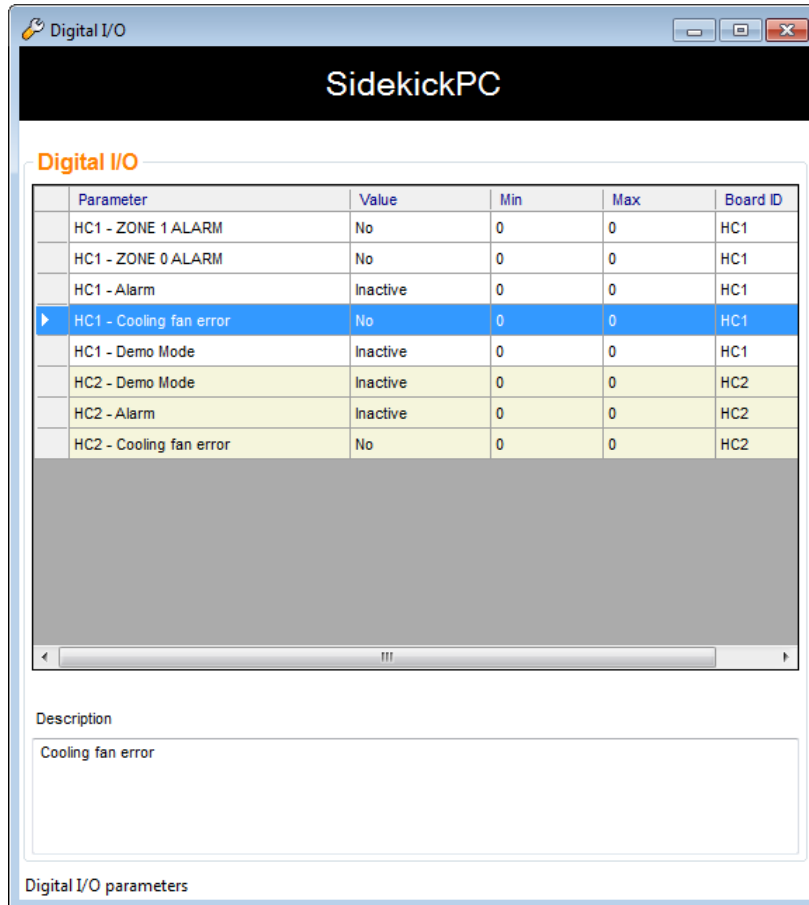


Fig. 72. Cooking: Digital I/O Form

3.12. MACS Bus Activity

When the diagnostic session is based on the MACS bus (cooking appliances), the software shows at the bottom of the main form an additional status bar that indicates basic information about bus activity:

- **Average rate of messages per second** (left side): average rate of MACS messages coming from the bus;
- **Diagnostic session duration** (right side): session timer that gives you a reminder about how long you have been connected to the appliance.
- **Total messages:** total number of messages collected from the bus.

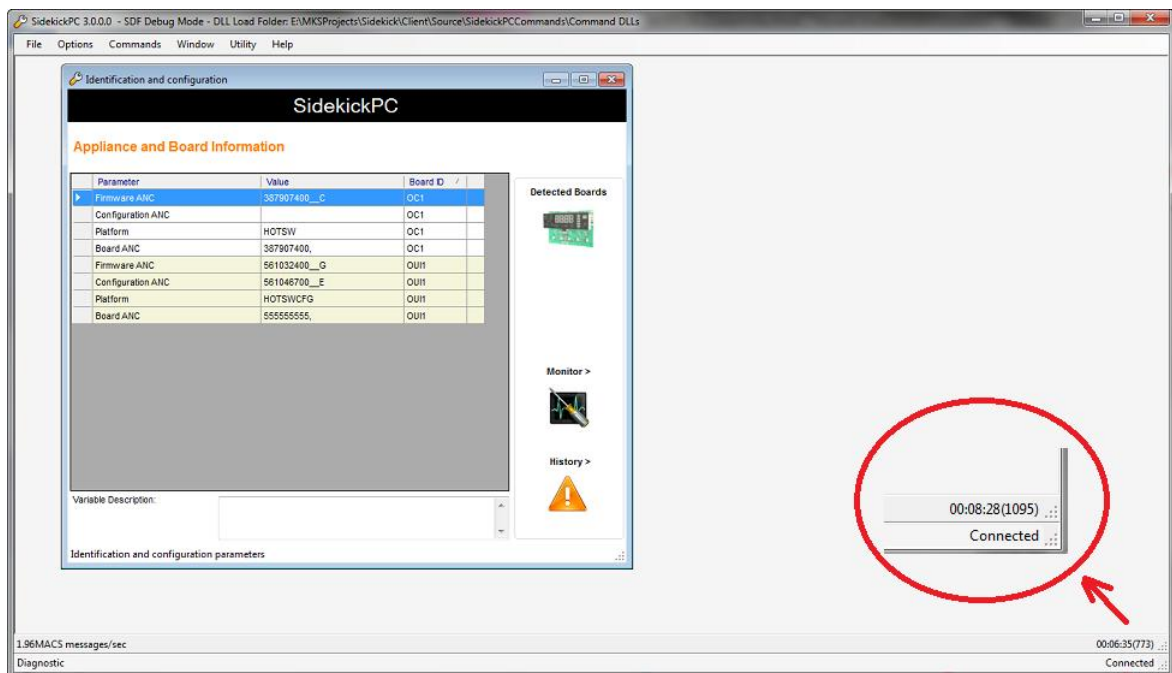


Fig. 73. MACS Bus Status information

If you double-click the session timer at the bottom left corner, you activate a new dialog box that displays all MACS messages coming from the bus. Each column in the grid represents:

- **Timestamp:** date/time of the message;
- **Message:** description of the message;
- **S ->D:** the sender (Source's unit ID) and the receiver (Destination's unit ID) of the message;
- **Length:** the length of the message;
- **Message Bytes:** MACS message in raw format.

If you select a message on the grid, on the right panel you will see a detail view of the selected message as below picture shows:

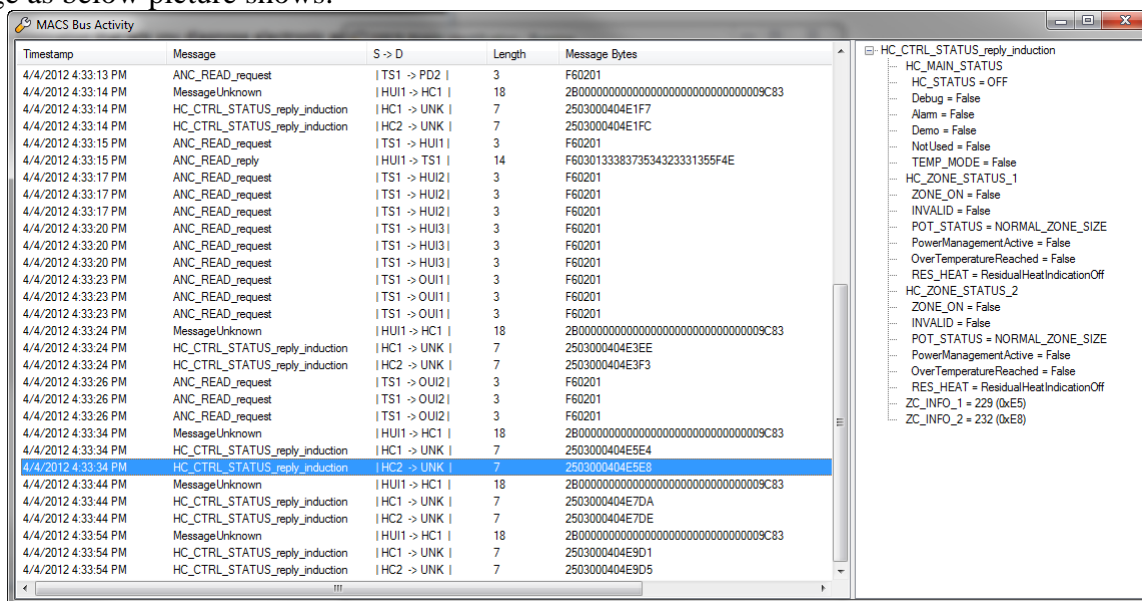


Fig. 74. MACS Bus Activity form

This feature is normally not needed during field service operations. It is instead used for laboratory purposes.

3.13. Appliance Information

If in the Start page you select the **Appliance Information** command, a dialog box asks you to insert the PNC/ELC of the appliance. You can insert optional blank and slash (/) characters in order to increase the readability of the string.


By clicking the  icon, a list containing all the PNC/ELC Codes stored in the local database appears. You can select one item from the list and you have the possibility to restrict the selection list by filling the **Starts with** field.



Fig. 75. Specify PNC/ELC Form

After that you have inserted the code and pressed the OK button, the software shows you a form that provides basic information about the electronic configuration of the appliance:

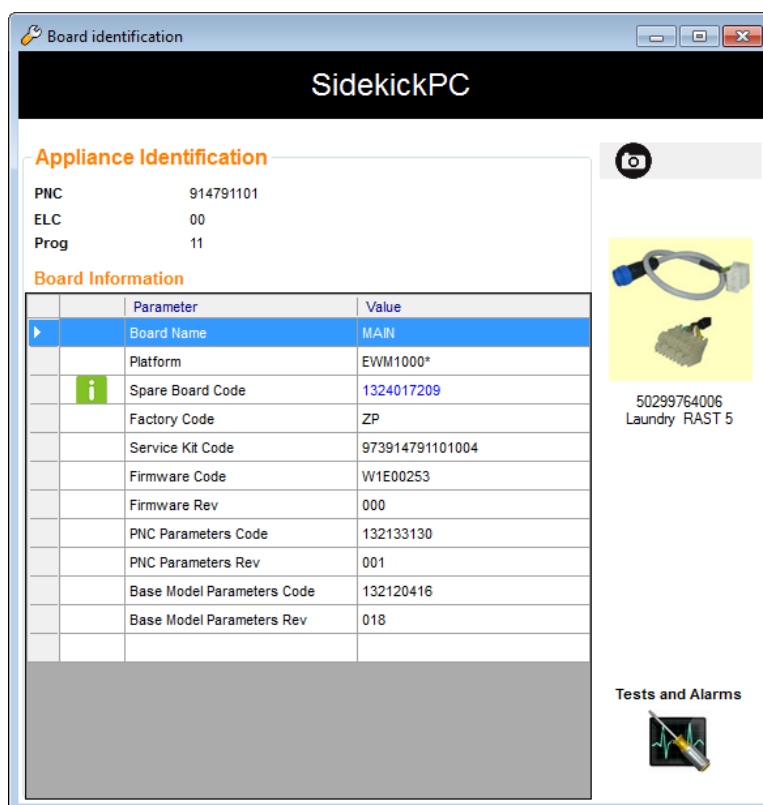


Fig. 76. Identification and Configuration Form

This form provides the following information:

- Board Name:** name of the electronic board;
- Platform:** name of the electronic platform;
- Spare Board Code:** spare part number of the not configured board;
- Factory Code:** a code that identifies the factory;
- Service Kit Code:** spare part number of the configured board;
- Firmware Code:** a code that identifies the firmware;
- Firmware Rev:** firmware revision;
- PNC Parameters Code:** a code that identifies the configuration parameters;
- PNC Parameter Rev:** configuration parameters revision;
- Base Model Parameters Code:** a code that identifies the basic configuration parameters;
- Base Model Parameters Rev:** basic configuration parameters revision.

If you click the spare board code, the **Spare Board Information** form appears (please refer to the corresponding paragraph in this manual for more information about this form).

If you click the **Tests and Alarms** button the following form appears:

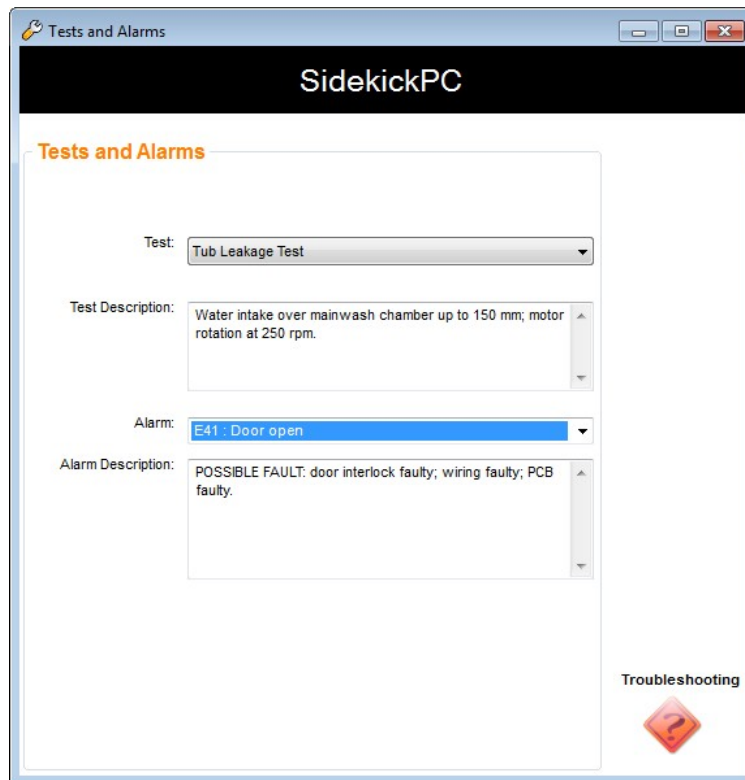


Fig. 77. Tests and Alarms Form

This form shows a drop-down control named **Test** containing a test selection list, by selecting a test you can see the corresponding description into the **Test Description** textbox.

Below there is another drop-down control named **Alarm** containing a list of all alarm codes, by selecting one alarm code the corresponding description is shown in the **Alarm Description** textbox.

With the **Troubleshooting** command you can select and execute troubleshooting procedures in off-line mode. The troubleshooting button is enabled only if there is at least one procedure available. If you press this button you can see the **Troubleshooting List** dialog:

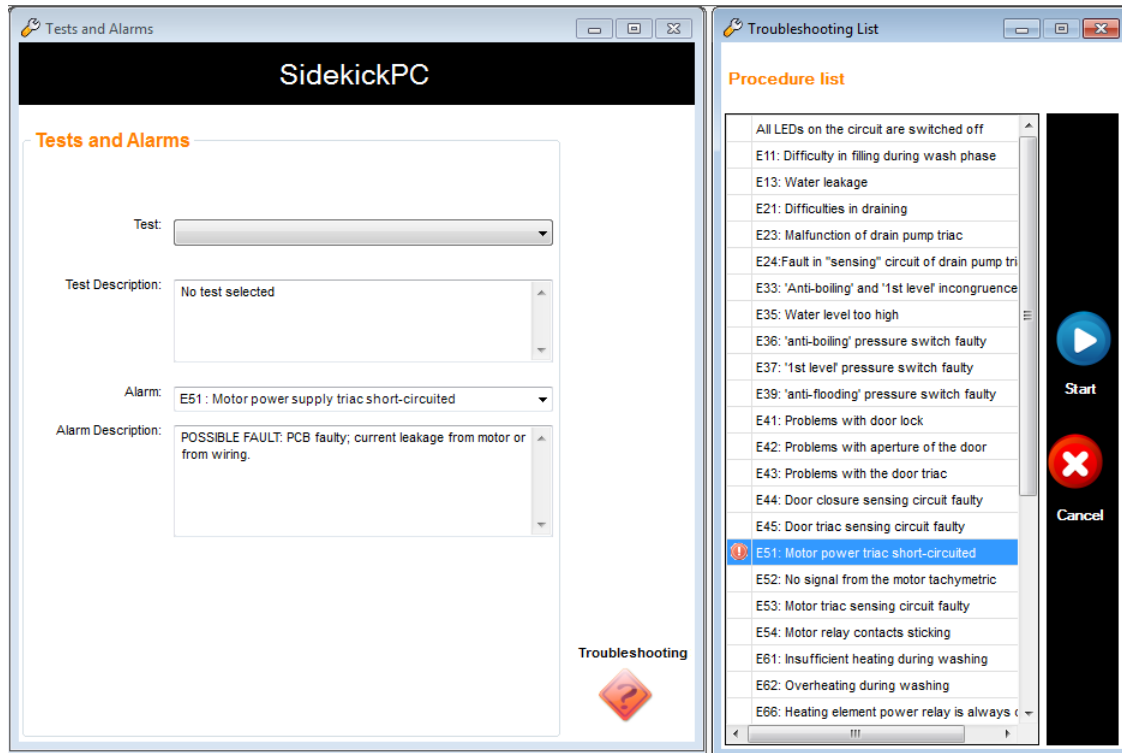


Fig. 78. Troubleshooting List

This dialog shows the list of all available troubleshooting procedures in the database.

By changing the Alarm in the alarm selection list, the corresponding procedure in Troubleshooting List is highlighted. In order to start the Troubleshooting Wizard for a certain procedure just select it from the list and press Start button.

The function is very similar to the troubleshooting procedure executed while you are diagnosing an appliance that is really connected. The only difference is that in this case SidekickPC does not send any commands to the appliance.

4. APPENDIX

This appendix describes the manual software installation. Sometimes you may need to execute a manual installation, for example in order to override default setup options or for investigating setup problems.

4.1. MANUAL SOFTWARE INSTALLATION

This paragraph describes the sequence of steps in a typical setup procedure on a PC running Windows XP without any additional installed software. Setup steps may however vary depending on the actual operating system and software configuration of the PC.

You must log on as full Administrator in order to make the installation of the software.

4.1.1. SidekickPC Setup

1. Run the **SETUP.EXE** program that is present in the root folder of the distribution CD.
2. If the .NET Framework 2.0 is not installed, SETUP asks you to install it. Just press **Accept** to go on:

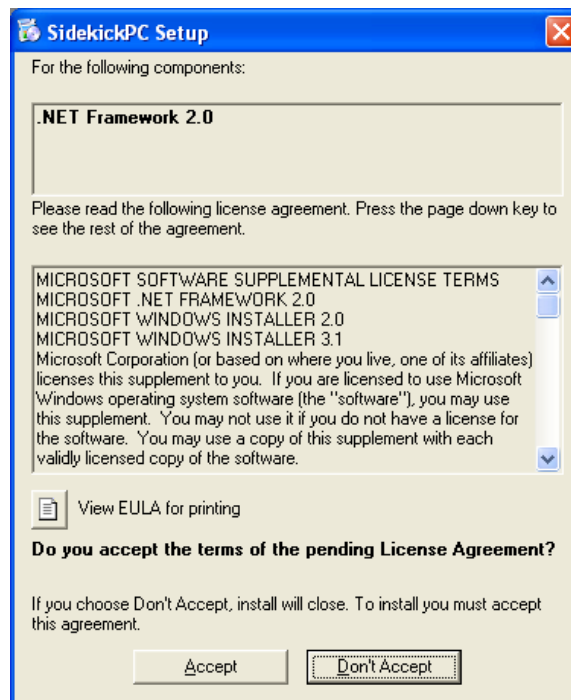


Fig. 79. Install .NET Framework 2.0

3. If the WSE 3.0 Runtime is not installed, SETUP asks you to install it. Just press **Accept** to go on:

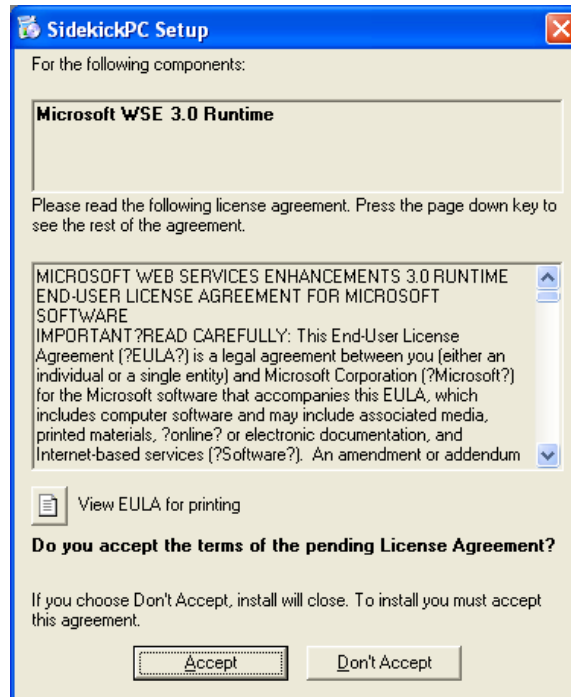


Fig. 80. Install WSE 3.0 Runtime

4. If Windows Installer 3.1 is not installed, SETUP asks you to install it. Just press **Accept** to go on:

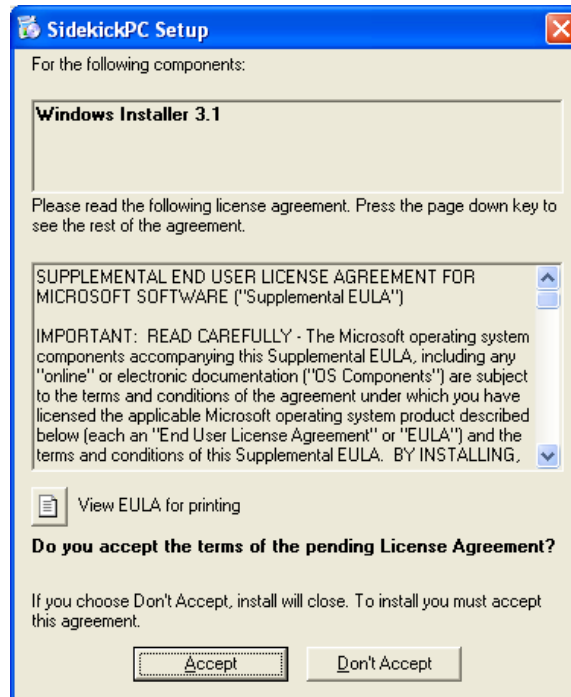


Fig. 81. Install Windows Installer 3.1

5. After installing Windows Installer 3.1 prerequisites, you are asked to reboot your PC.

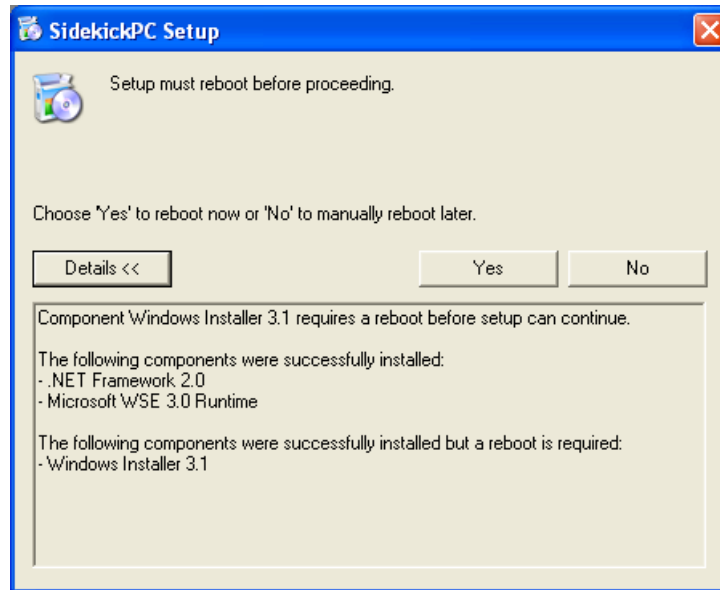


Fig. 82. Reboot the system

6. Reboot the PC, log on as full Administrator and, if necessary, run again SETUP.EXE. If there is no SQL Server 2005 installed instance, you immediately get an error message like the following one. Otherwise skip to step 7.

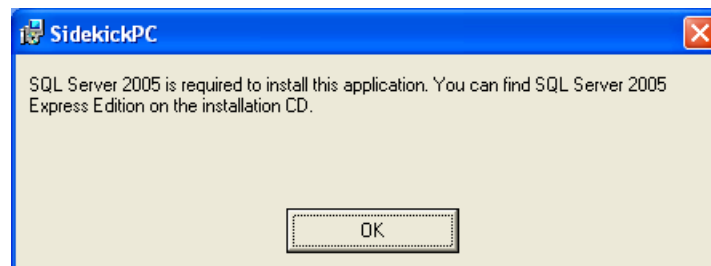


Fig. 83. SQL Server 2005 Required

Press **OK** to quit SETUP without completing the installation:

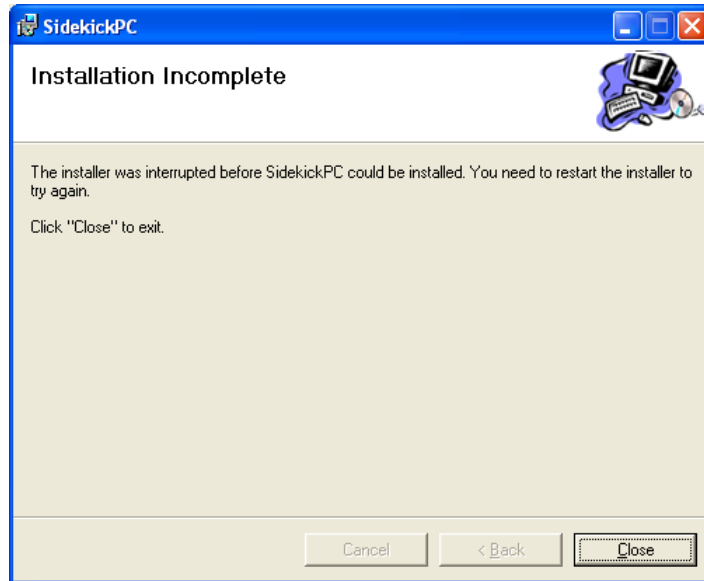


Fig. 84. Installation Incomplete

7. Run the **SQLEXPRESS.EXE** program located in the **SqlExpress** folder in the distribution CD and accept the license agreement. This program checks and installs prerequisites. At the end press **Next**:

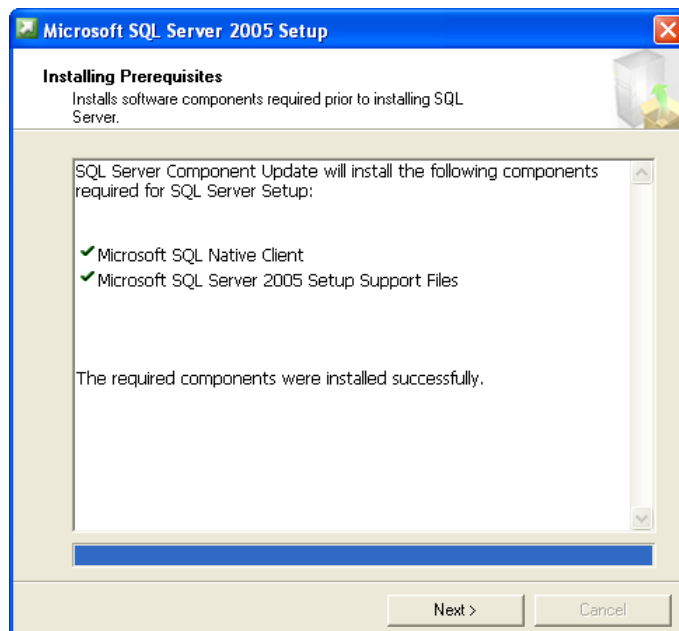


Fig. 85. SQL Server Express Setup – Prerequisites Installation

8. After the System Configuration Check press Next:

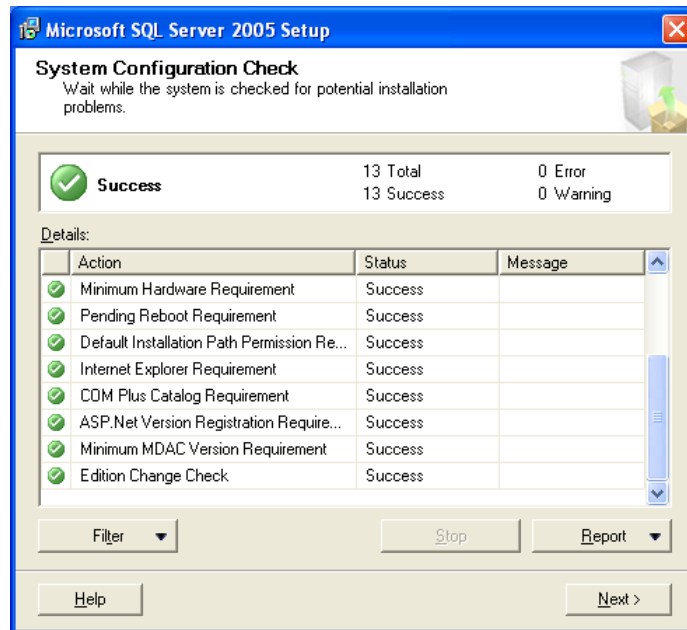


Fig. 86. SQL Server Express Setup – System Configuration Check

9. After entering registration data press Next:

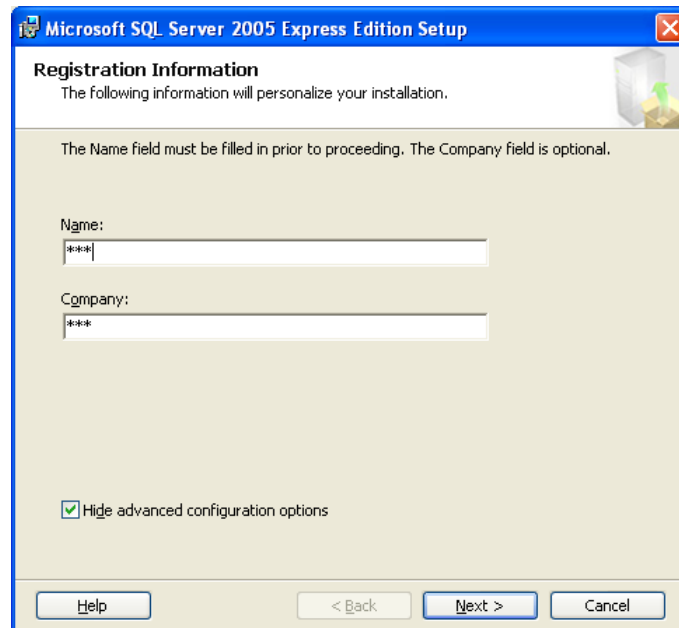


Fig. 87. SQL Server Express Setup – Registration

10. You can keep the default features. Then press Next:

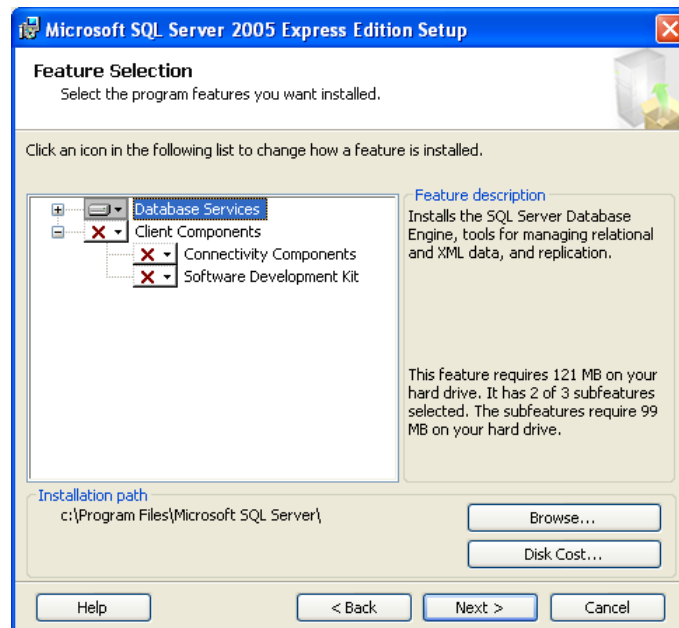


Fig. 88. SQL Server Express Setup – Feature Selection

11. You can keep the default for Authentication Mode (the setup program will later automatically change this setting to Mixed Mode):

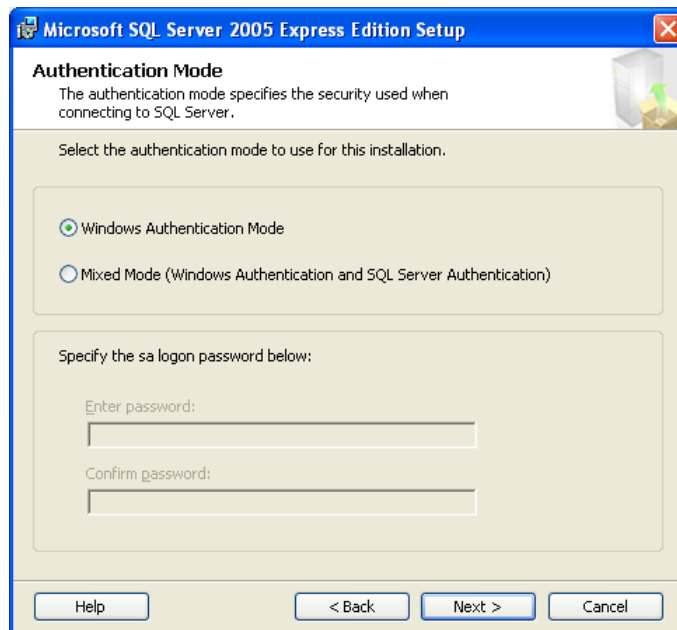


Fig. 89. SQL Server Express Setup – Authentication Mode

12. **Important:** select both checkboxes in the Configuration Options window and press Next.

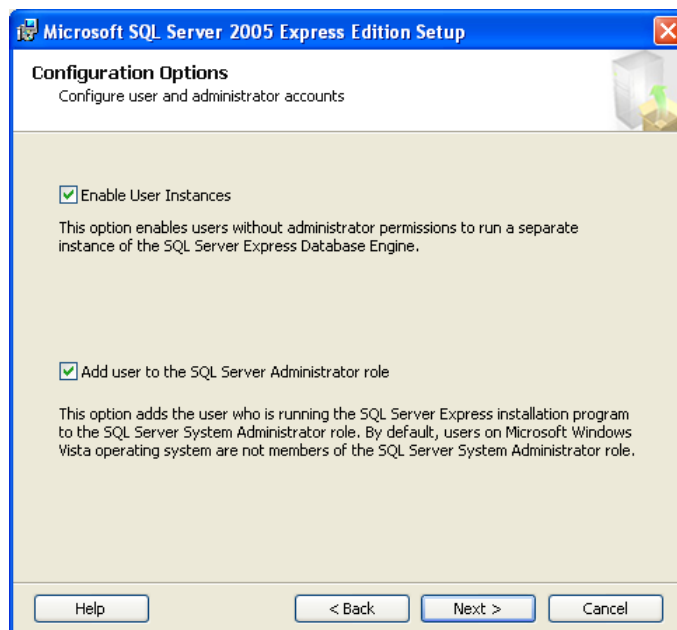


Fig. 90. SQL Server Express Setup – Configuration Options

13. Keep the default options for Report Settings, then press Next:

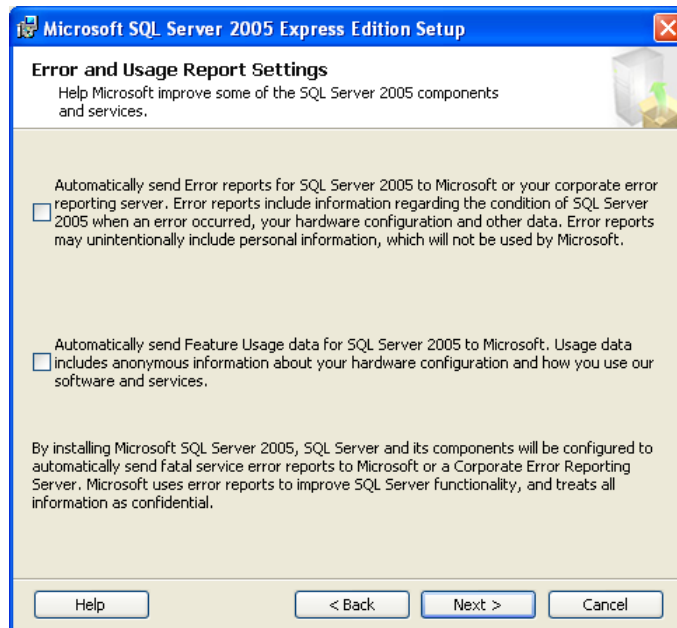


Fig. 91. SQL Server Express Setup – Report Settings

14. SQL Server 2005 is ready to install. Press Install:

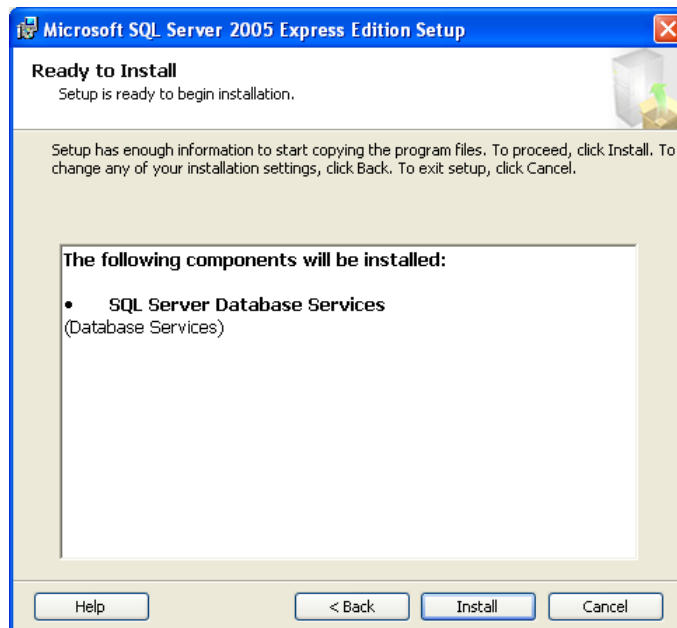


Fig. 92. SQL Server Express Setup – Ready to install

15. Wait until the end of SQL Server setup, then press Next:

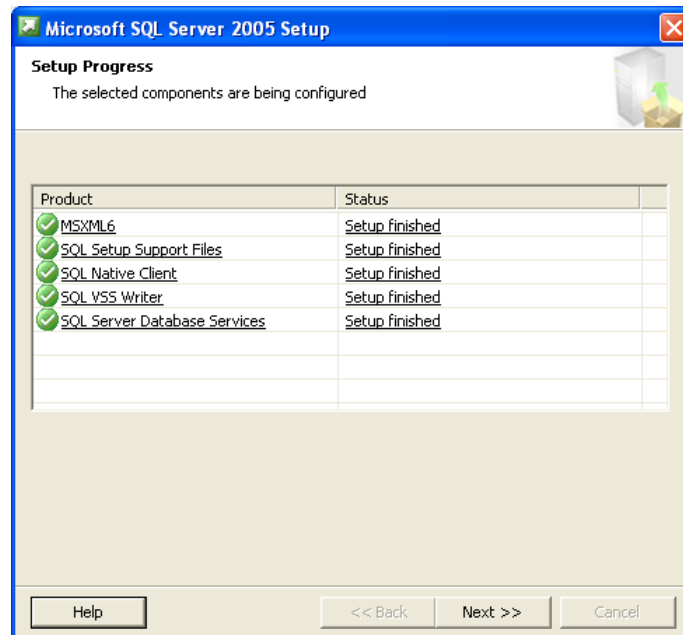


Fig. 93. SQL Server Express Setup – End of Setup

16. Just press Finish to complete the setup procedure:

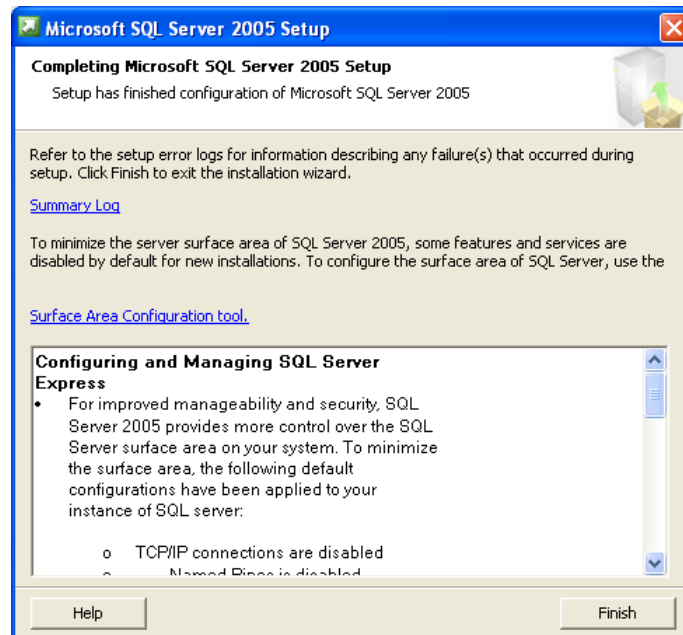


Fig. 94. SQL Server Express Setup – Optional Steps

17. If you have just installed SQL Server 2005 Express, run again SETUP.EXE. You are now prompted to choose the installation folder. Keep the default settings unless strictly necessary. Please remember that you cannot specify special folders like “**C:\Program Files**”, “**C:\Documents and Settings\All Users\Application Data**”, or “**C:\Windows\System32**”. If you do it, the setup will show you an error message and rollback the entire process. This limitation is due to a compatibility issue related to the Microsoft Vista and Windows 7 operating systems:

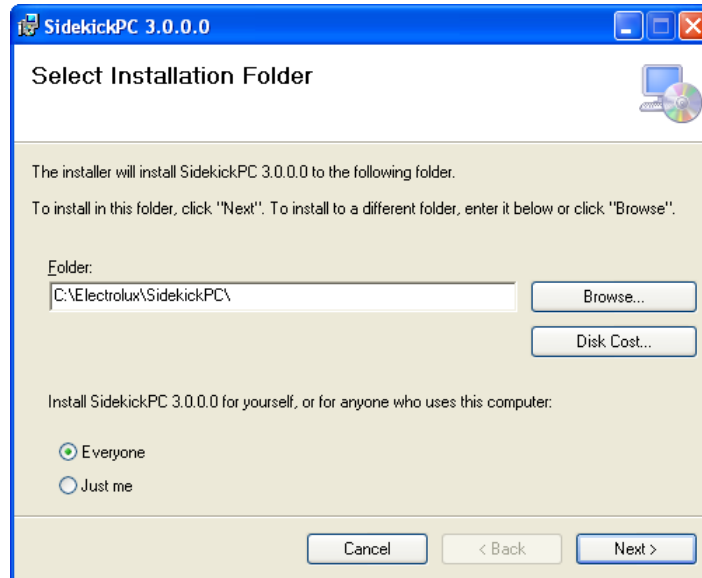


Fig. 95. Select Installation Folder

18. SETUP asks you to choose the settings of the Database that it is going to automatically create. It is possible to specify a database and login created with a previous installation of the software. Keep the default settings unless strictly necessary. **Data Source** identifies the SQL Server instance that will hold the local database. **Database** is the name of the local database. **User ID** and **Password** are the credential of the login to the local database. Please remember that, by default, SidekickPC uses “Mixed Authentication” to connect to the local database:

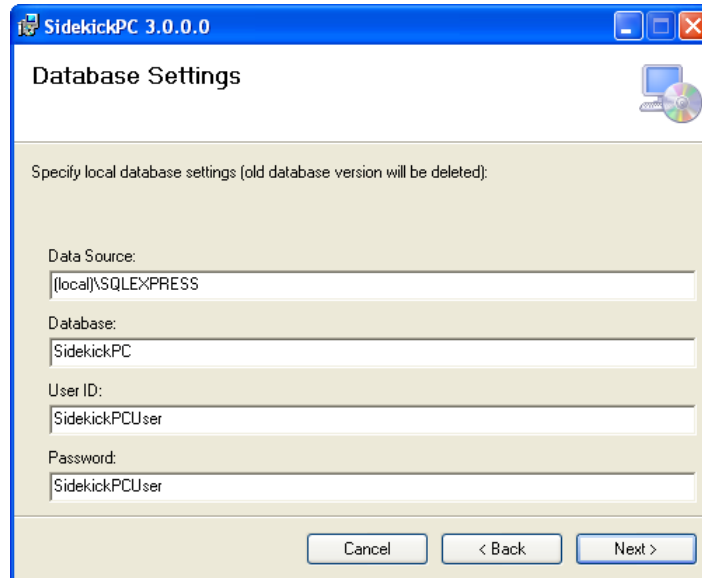


Fig. 96. Database Settings

19. Specify the URL and credentials for the Web Services Settings that the application will use to download data updates, if you already know them. For **Username** and **Password** you should use the login information you have been given with an automatic e-mail notification when your account was created. These are the same credentials that you use to access to the reserved area in the Sidekick Portal:

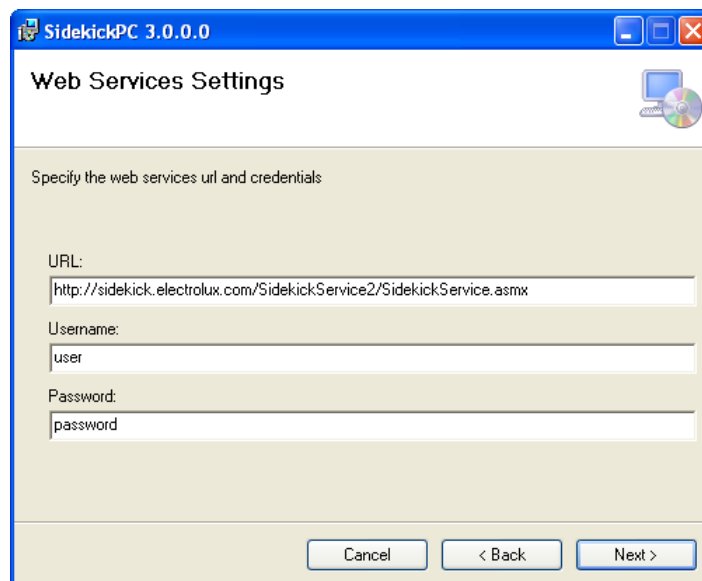


Fig. 97. Web Service Settings

20. Enter your license number in the Activation Settings window, if you already know it. You should use the license number you have been given with an automatic e-mail notification when your account was created:

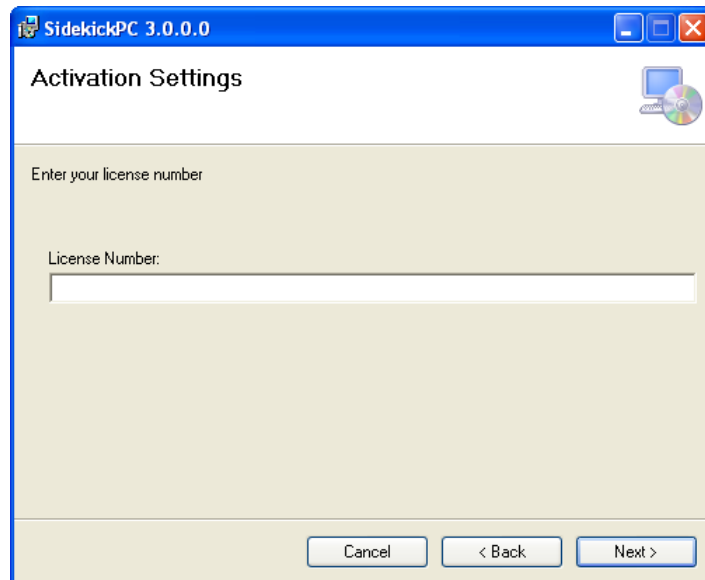


Fig. 98. Activation Settings

21. Confirm the installation and wait for the completion of the process. If any errors occur during the setup, an installation log appears. Otherwise no other dialog appears, except the final one.
22. SETUP finally completes. Just press Close to end the process:

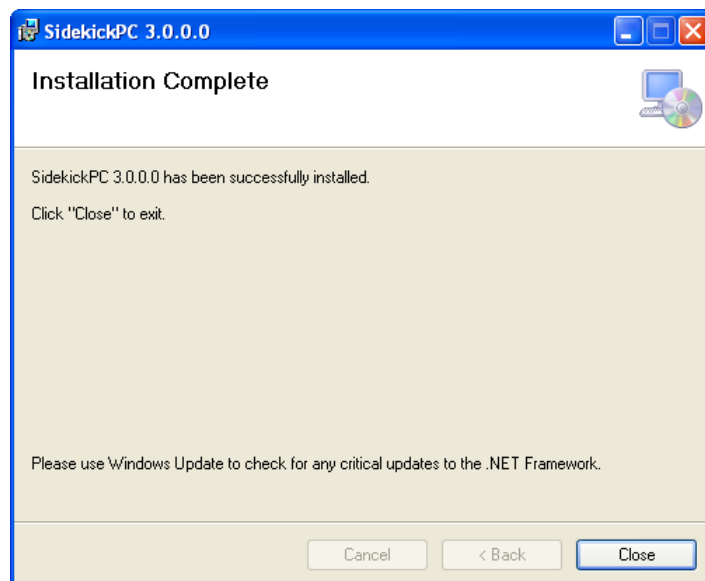


Fig. 99. Installation Complete

4.1.2. SQL Server Management Studio Express Setup

This section describes the optional installation of SQL Server Management Studio Express. The installation of this software is only necessary for software troubleshooting purposes. This is a tool for the administration of the local database, only necessary for software support activities. In most cases you can simply skip this section.

1. Run the **SQLServer2005_SSMEE.msi** installer located in the **Extra\Microsoft SQL Server Management Studio Express** folder in the distribution CD. In the welcome dialog press Next:

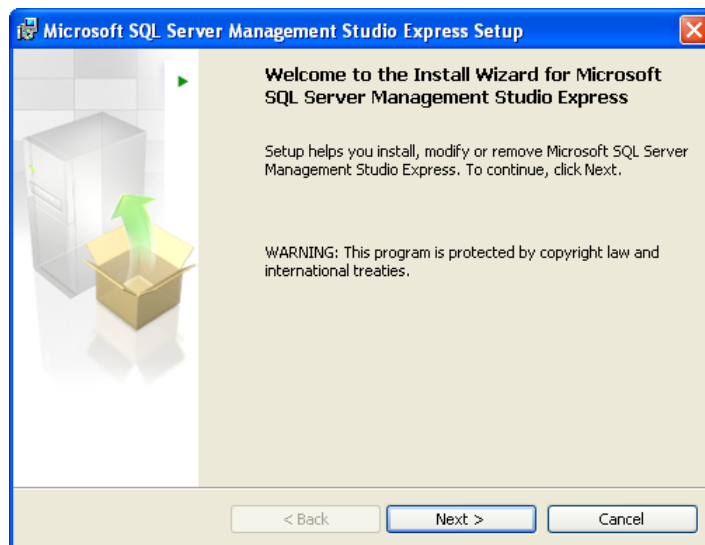


Fig. 100. SQL Server MS Express Setup - Welcome

2. Accept the license agreement, then press Next:

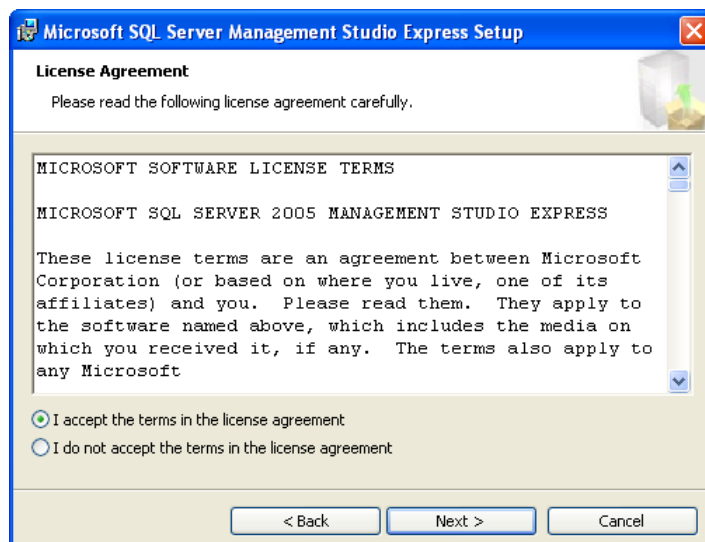


Fig. 101. SQL Server MS Express Setup – License Agreement

3. Insert registration information, then press Next:

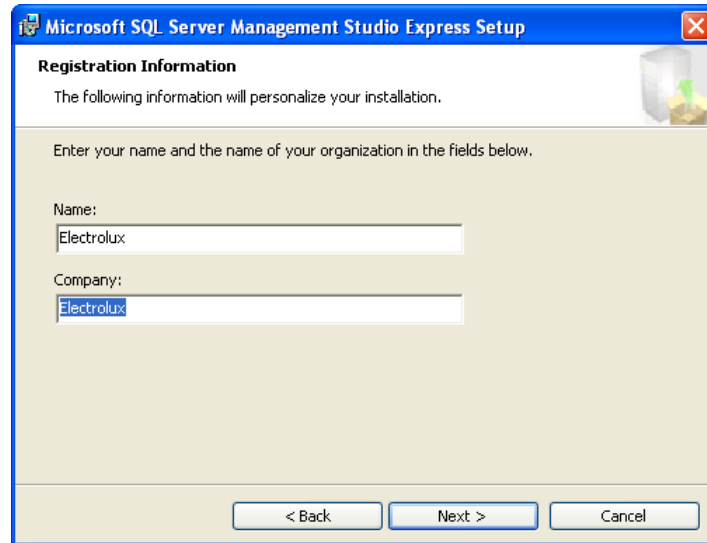


Fig. 102. SQL Server MS Express Setup – Registration

4. You can select the default features. Then press Next:

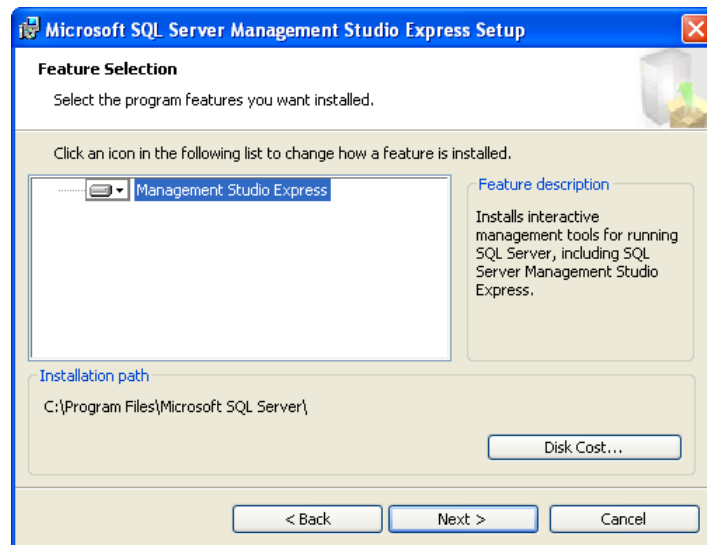


Fig. 103. SQL Server MS Express Setup – Feature Selection

5. SQL Server Management Studio Express is ready to install. Press Install:

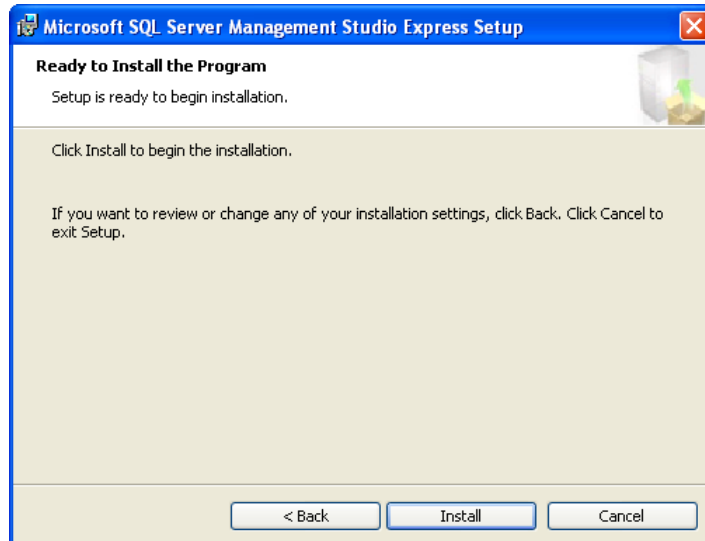


Fig. 104. SQL Server MS Express Setup – Ready to Install

6. Wait until the end of setup, then press Finish:

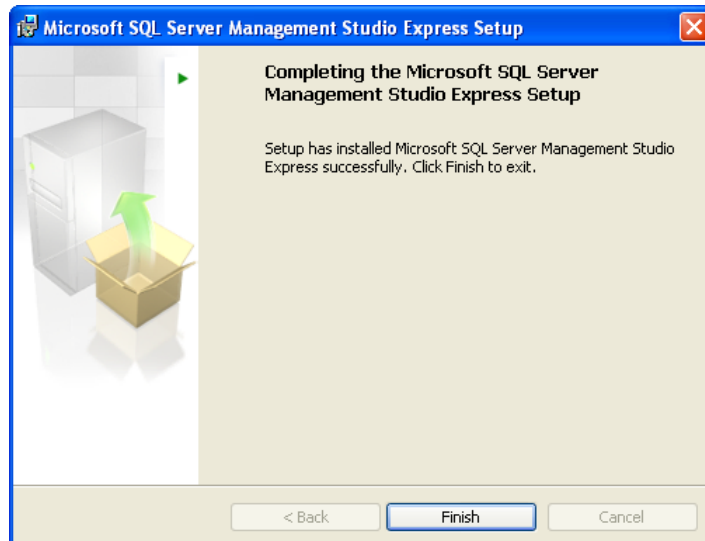


Fig. 105. SQL Server MS Express Setup – End

4.2. TROUBLESHOOTING SETUP PROBLEMS

In this section you can find additional information that you may need in order to solve installation problems.

4.2.1. Manual installation of prerequisites

Under certain circumstances, the Sidekick setup procedures may not be able to detect the absence of one or more software prerequisites. In this case you can install them manually prior running the manual or automatic setup.

In case of need, you should manually install the prerequisites in the following order:

1. **Microsoft Windows Installer 3.1**. Run the `\WindowsInstaller3_1WindowsInstaller-KB893803-v2-x86.exe` file.
2. **MDAC 2.8**. Run the `\MDAC28\mdac_typ.exe` file.
3. **Microsoft .NET Framework 2.0 – SP2**. Under Windows XP or Vista 64-bit run the `\dotnetfx\64-bit\NetFx64.exe` file. Under Windows XP or Vista 32-bit run the `\dotnetfx\32-bit\dotnetfx.exe` file.
4. **Microsoft WSE 3.0**. Run the `\WSE3_0\Microsoft WSE 3.0 Runtime.msi` file
5. **Microsoft SQL Server Express Edition 2005 SP4**. Run the `\SqlExpress\SQLEXPRESS.EXE` file. At this point the SQL Server setup program may detect that Microsoft Internet Explorer 6.0 SP1 is missing. In this case you must stop the installation and run `\Extra\IE6Setup\ie6setup.exe`, prior installing SQL Server.
6. **SQL Server Management Studio Express** (optional). Run `\Extra\Microsoft SQL Server Management Studio Express\SQLServer2005_SSMSEE.msi`.

4.2.2. SQL Server installation problems

Under certain circumstances, the SQLEXPRESS.EXE program may encounter problems depending on the actual configuration of the PC and of the network. These problems are outside the control of Electrolux.

In case of problems you can find in the internet plenty of information regarding tips and workarounds related to setup issues. You should in particular refer to Microsoft forums dealing with the matter. Experience collected so far by CTI has revealed a few problems regarding the setup of SQL Server 2005 Express Edition. You can find the solution for these problems here:

<http://sidekick.electrolux.com/SidekickPortal/UsersReservedArea/DownloadDetails.aspx?ContentID=ApplicationNote3>