

User's Guide

**For ElementTM Automatic Coding Blood
Glucose Monitor**

Communication Program

infopia Co., Ltd

Version 1.00

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1. Introducing Element™ communication program

1. 1 About this guide

This guide is designed to show how to install and use the Element™ communication program to our blood glucose monitoring system users. This way, our users can monitor and manage the diabetes systematically with graphs and charts. This program is easy to install and easy to use, and provides a variety of reports.

1. 2 Contacting Customer Service

If you have any problem by using this program , please contact our customer service, 82-31-460-0300 or visit our website at <http://www.infopia21.com> so that you could download Windows Communication Program.

(<http://www.infopia21.com/en/client/faq.php>)



2. Components of ElementTM communication program package

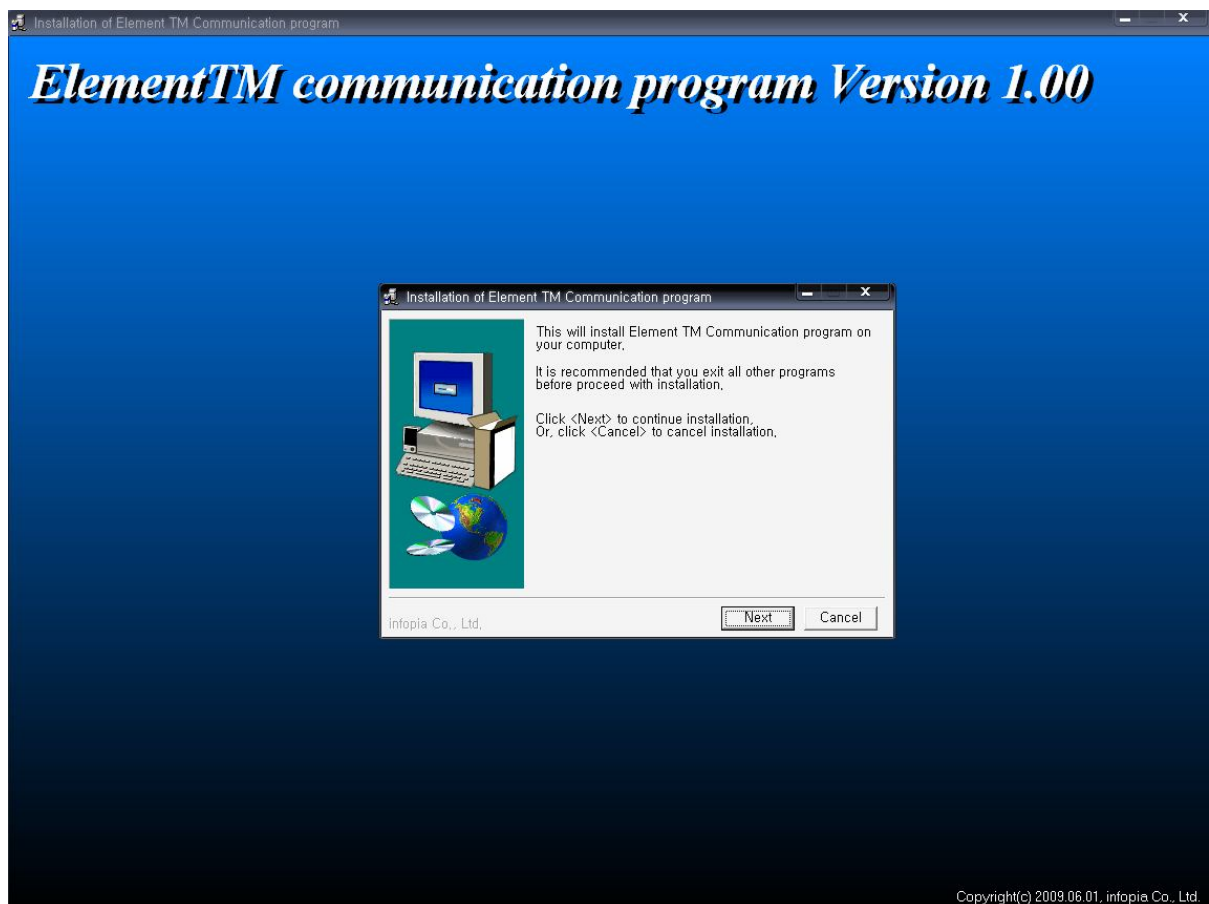
- PC communication cable (Serial or USB)
- Blood glucose management program set-up program (website)
- Blood glucose management user's guide

3. System requirements

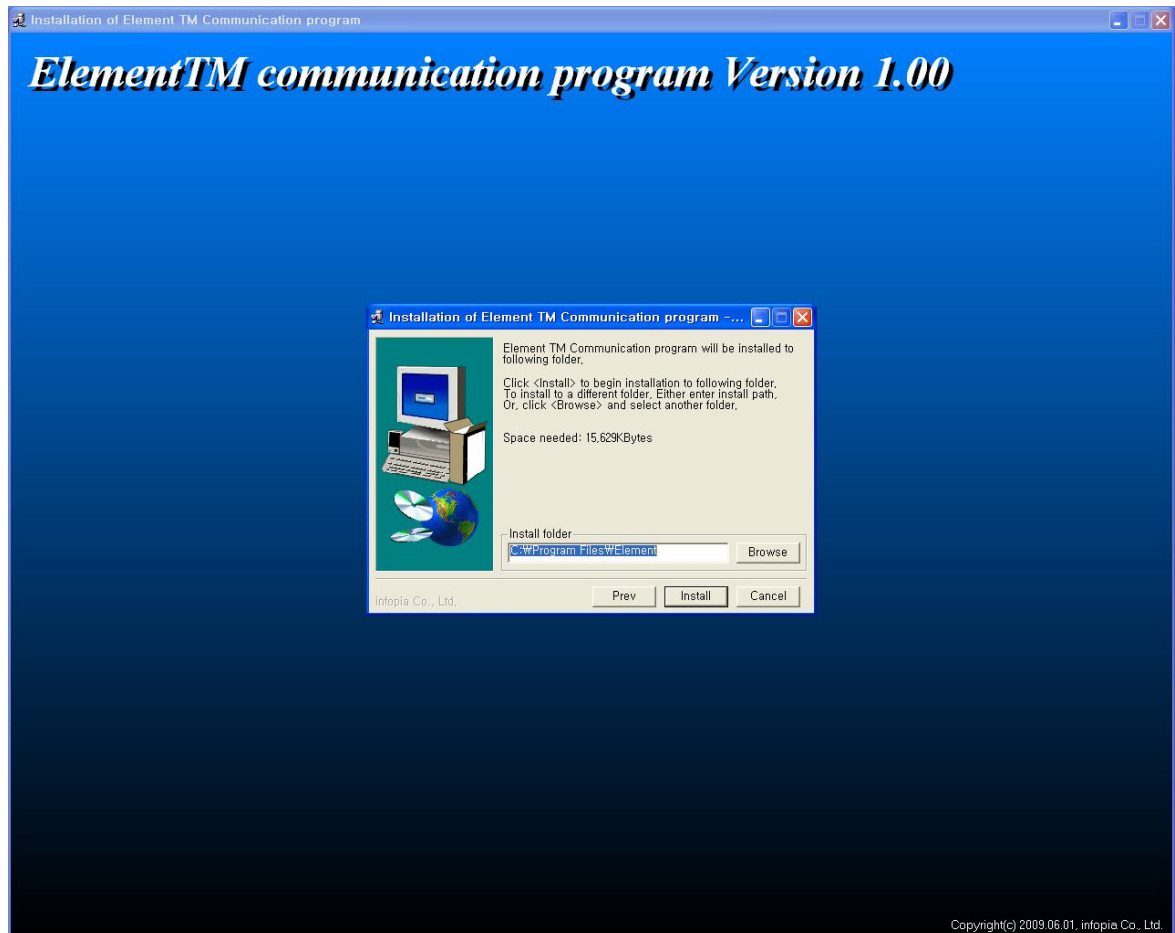
- OS: Windows98(SE), WindowsME, Windows2000, WindowsXP, Windows Vista
- CPU : Pentium 1 or above
- RAM : 64mega bytes or above
- Pixel : 800 X 640 or above
- Hard disk : 10 mega bytes or above
- E-mail : Available through Outlook
- Port : COM1~COM20 (Auto Search)
 - Baud rate : 4800bps
 - Data Bit : 8
 - Parity : NONE
 - Stop Bit : 1

4. Program Installation

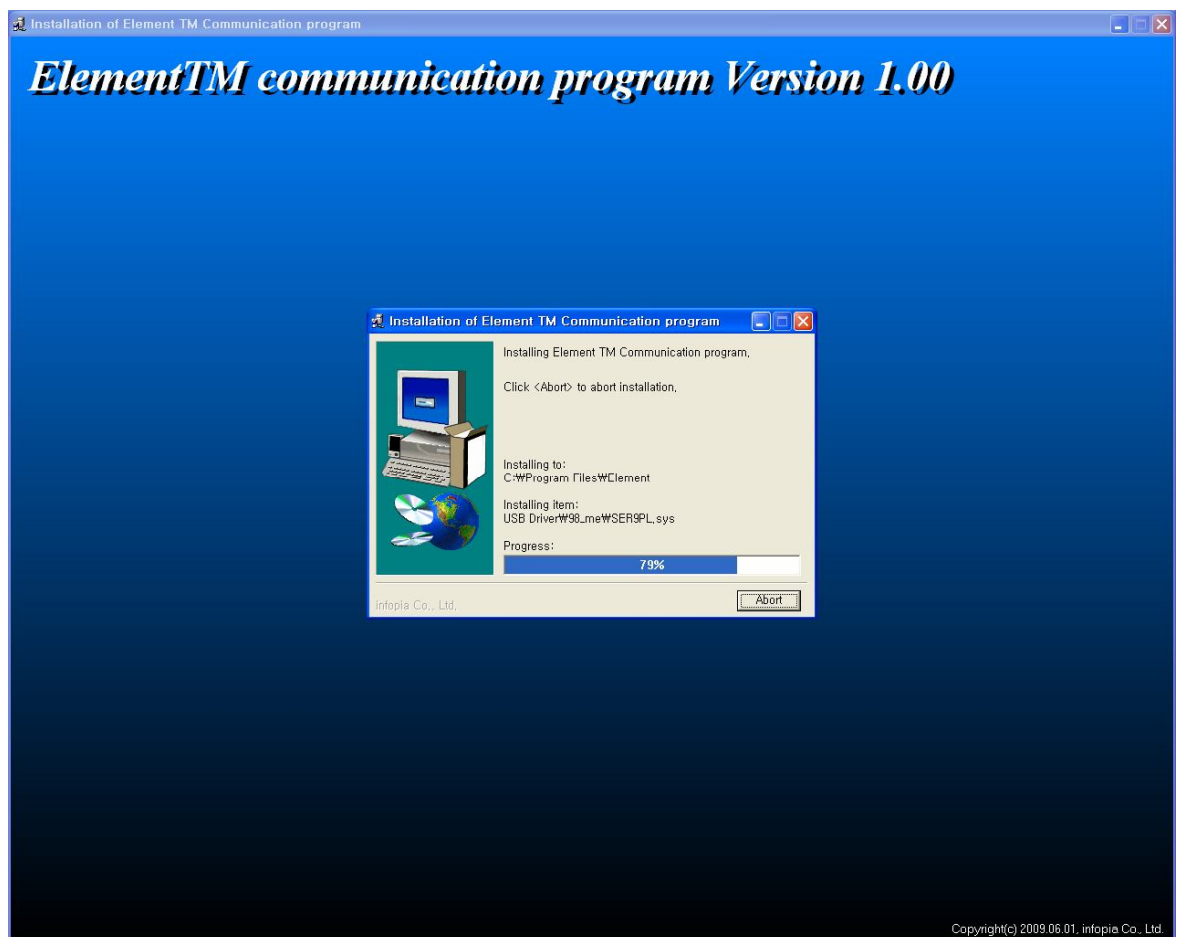
- 1) Insert the CD in your PC or download from the Infopia, Inc. website,
<http://www.infopia21.com>
- 2) Execute the “Element_setup.exe” file from the CD or desktop.
- 3) Click “Next”.



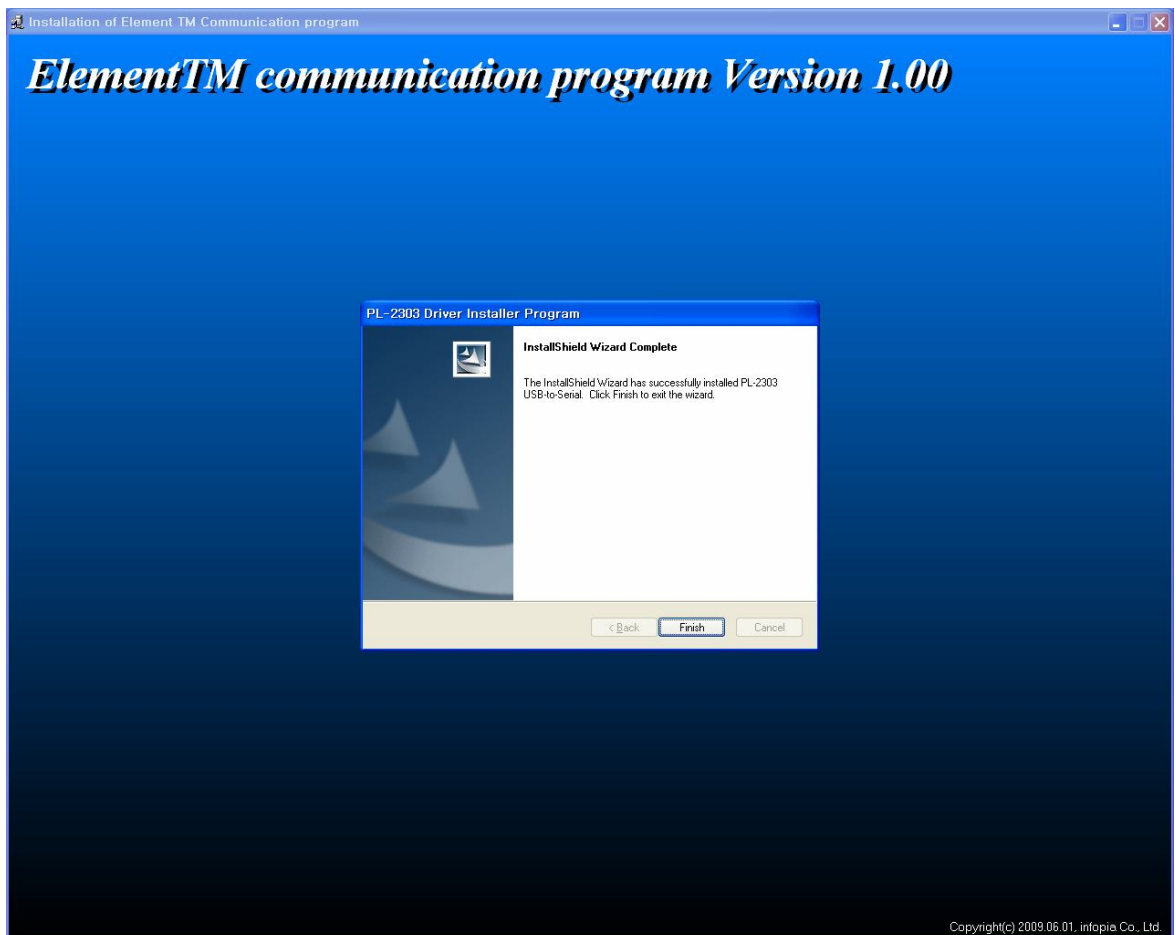
- 4) Designate the folder where you wish to install and click “Install”. It is recommended that you use the default folder. By clicking “Install”, the installation will be started.



5) The program installation will be processed automatically.



6) When shown the window “InstallShield Wizard Complete,” click “Finish”.



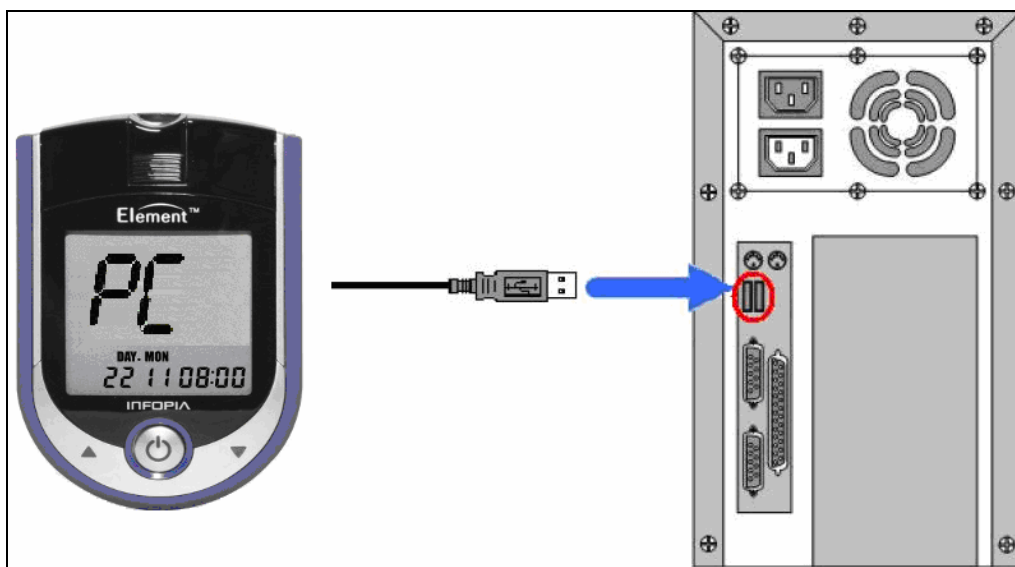
- 7) When the installation is completed, click “YES” button to restart your computer. You must restart your computer before using the Element™ software for the first time.



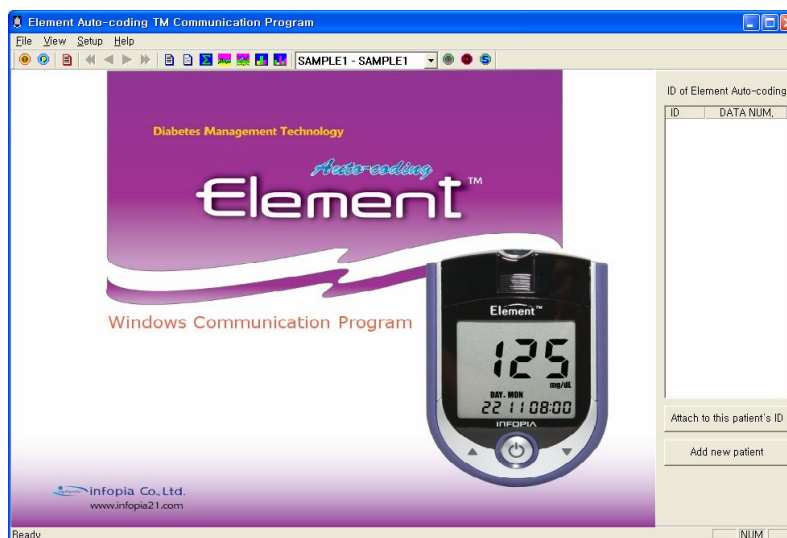
- 9) You will be able to find the Element™ icon on the desktop and on the [Start] – [Program] menu

5. Usage

- 1) Connect the ElementTM communication cable (USB) to your PC or laptop.



- 2) Click the ElementTM icon on the desktop or in the [Start]- [Program] menu to execute the ElementTM communication program.



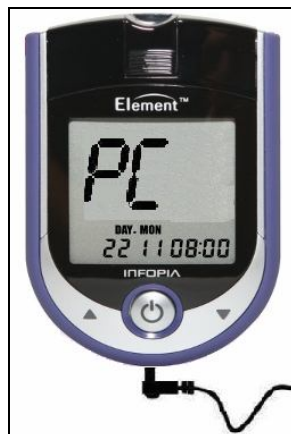
- 3) Go to [User Profile] and enter the user or patient's information to be recorded. After all information is entered, click "OK." A file is saved with the name of the ID in [User Profile]. If the user or patient's information already exists, you do not need to reenter it.

The image shows a 'User Settings' dialog box with a blue title bar and a close button. It contains three tabs: 'User Profile', 'Diagnosis', 'Time Settings', and 'Data Settings'. The 'User Profile' tab is active. The dialog is divided into three sections: Patient, Staff, and Physician. The Patient section has fields for ID (file name), Name, Sex, DOB, Phone, Mobile, E-mail, Fax, Address, Provider, Mention, Room No., and Bed No. The Staff section has fields for Name and Mention. The Physician section has fields for Name, Hospital, Phone, Mobile, E-mail, and Fax. At the bottom are buttons for OK, CANCEL, and APPLY.

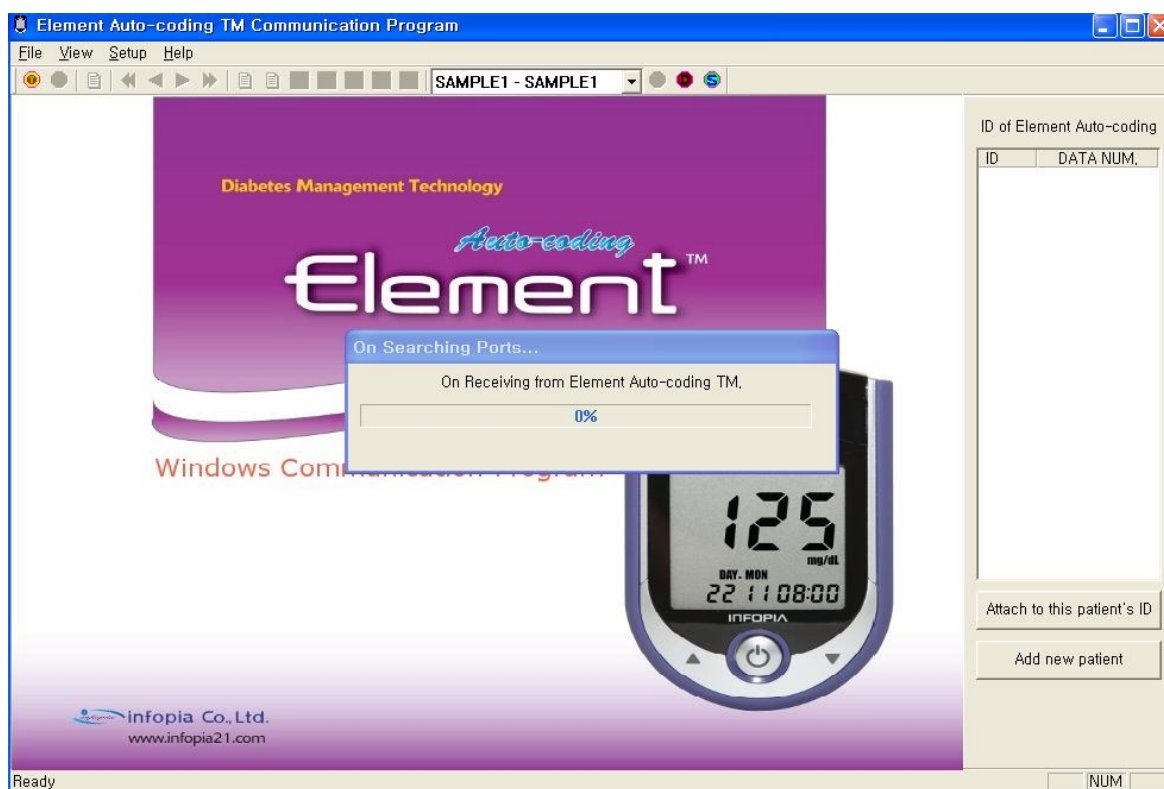
| Section | Field | Value |
|-----------|----------------|-------------|
| Patient | ID (file name) | SAMPLE1 |
| | Name | sample1name |
| | Sex | Male |
| | DOB | 1900-01-01 |
| | Phone | |
| | Mobile | |
| | E-mail | |
| | Fax | |
| | Address | |
| | Provider | |
| | Mention | |
| | Room No. | |
| Bed No. | | |
| Staff | Name | |
| | Mention | |
| Physician | Name | |
| | Hospital | |
| | Phone | |
| | Mobile | |
| | E-mail | |
| | Fax | |

Buttons: OK, CANCEL, APPLY

- 4) Connect the cable jack to the jack port of Element™ meter. The meter LCD screen will show the letters “PC.”



- 5) Execute [Receive meter data] on the menu bar of the program (or from the File menu) and the data stored in the meter will download to the PC. Pull out the cable jack from the meter. The letters “PC” will disappear from the LCD screen.



- 6) If you want to download more data from the meter, follow the steps from 1) to 5) again.

Troubleshooting/Error Messages

i) If “PC” does not appear on the LCD screen when you connect the cable jack to the jack socket of ElementTM meter, please check the following:

- (1) Check if the cable is connected to the PC firmly.
- (2) Check if the meter has battery power.

ii) If you receive a “Communication Error ” message when executing [Receive meter data] from the program menu bar to download the data stored in the meter to the PC, please check the following points.

- (1) Check if the cable is connected to PC firmly.
- (2) Check if the meter has battery power.

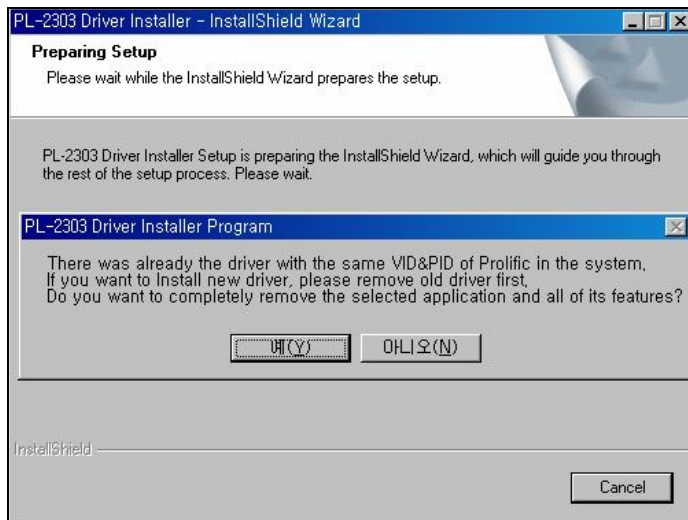
[General Error Case]

If you receive general error messages such as lack of space on hard drive or shortage of space for memory space and/or virus or malicious program:

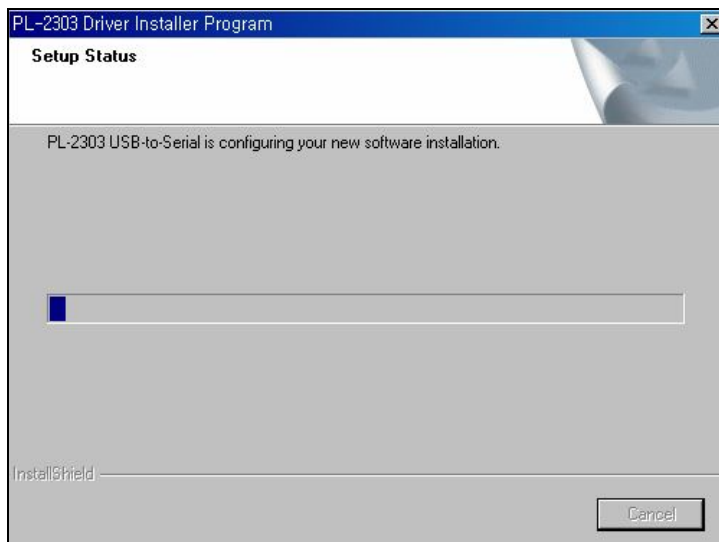
- Please secure the extra space for hard disk with 10 mega bytes or above by not executing too many programs.
- Please execute Anti Virus program in order not to be contaminated by virus or malicious program.

A) If the USB-Serial Driver did not install properly, follow these steps:

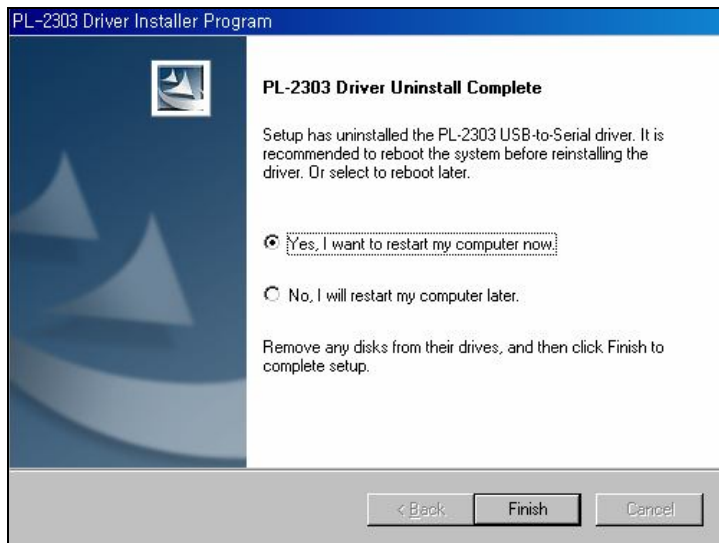
- 1) Search or type “C:\Program Files\Element\ USB-to-Serial Converter Driver All-in-One Installer\ PL2303_Prolific_DriverInstaller_10311.exe”.
- 2) Execute the “PL2303_Prolific_DriverInstaller_10311.exe” from the file.
- 3) If display the warning as following, click “Y” button.



- 4) The program un-installation will be processed automatically.



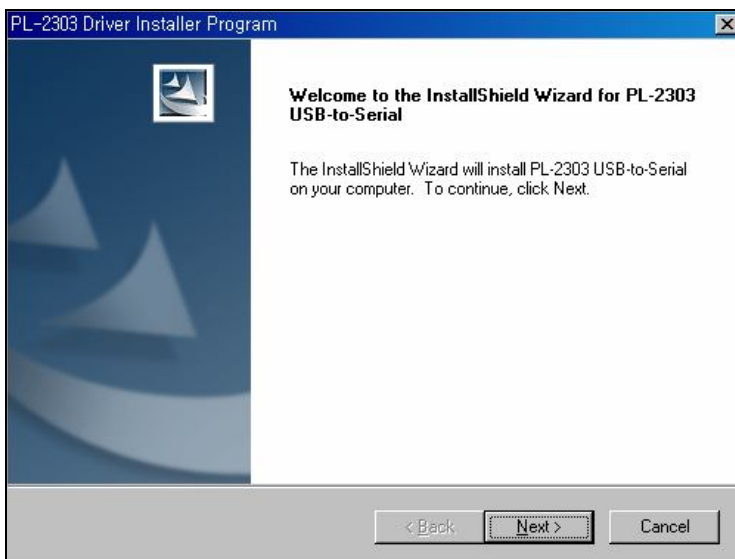
5) If display the uninstall-complete as following, click “Finish” button.



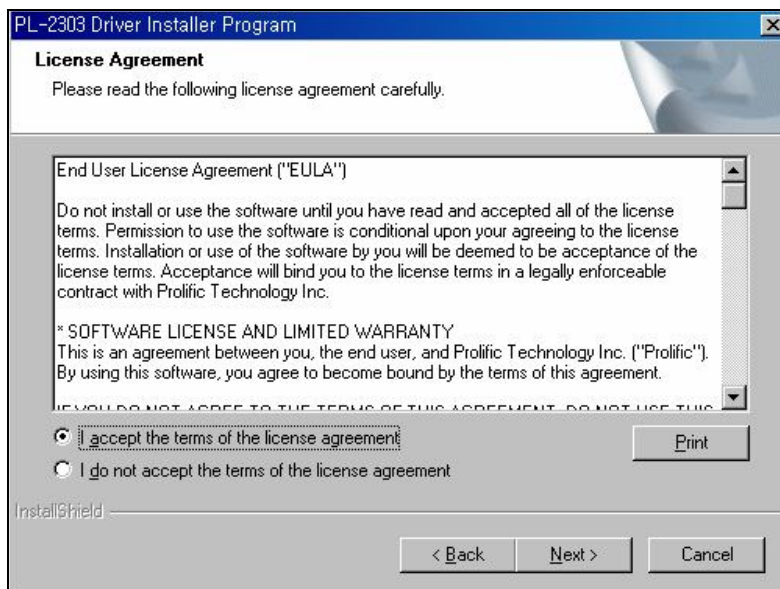
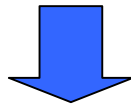
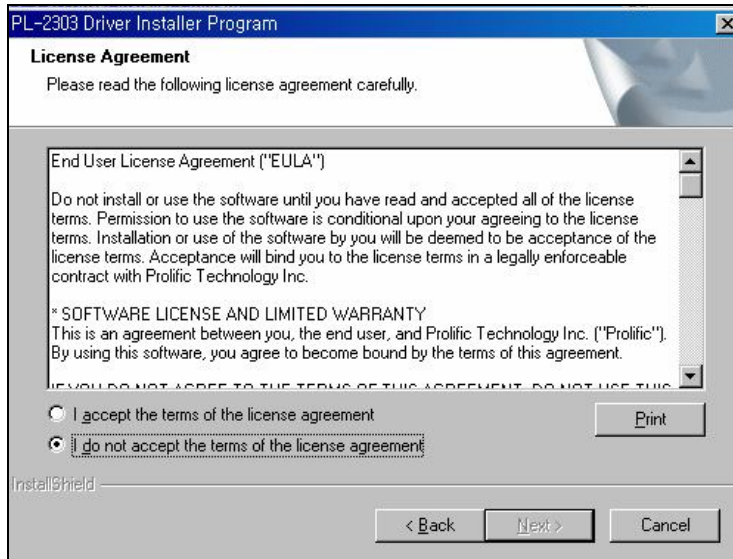
6) Restart your computer.

7) Search or type “C:\Program Files\Element\ USB-to-Serial Converter Driver All-in-One Installer\ PL2303_Prolific_DriverInstaller_10311.exe”.

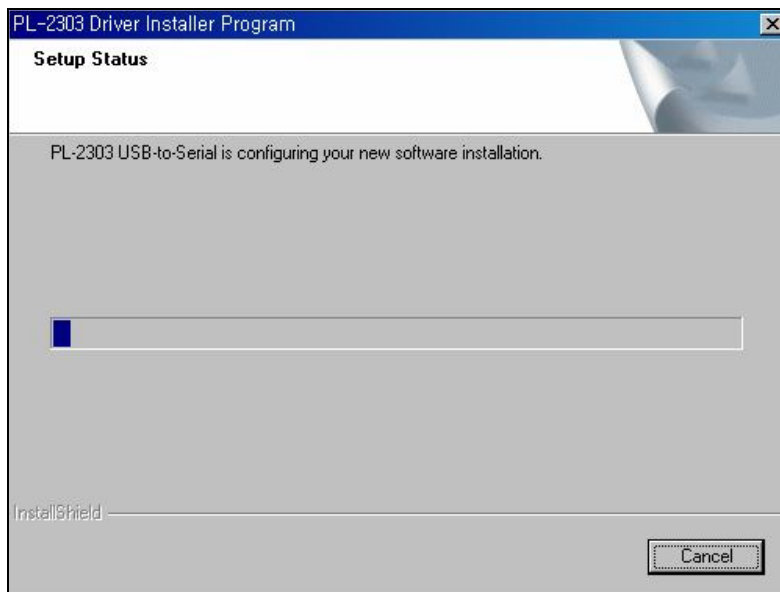
8) Execute the “PL2303_Prolific_DriverInstaller_10311.exe” \n from the file.



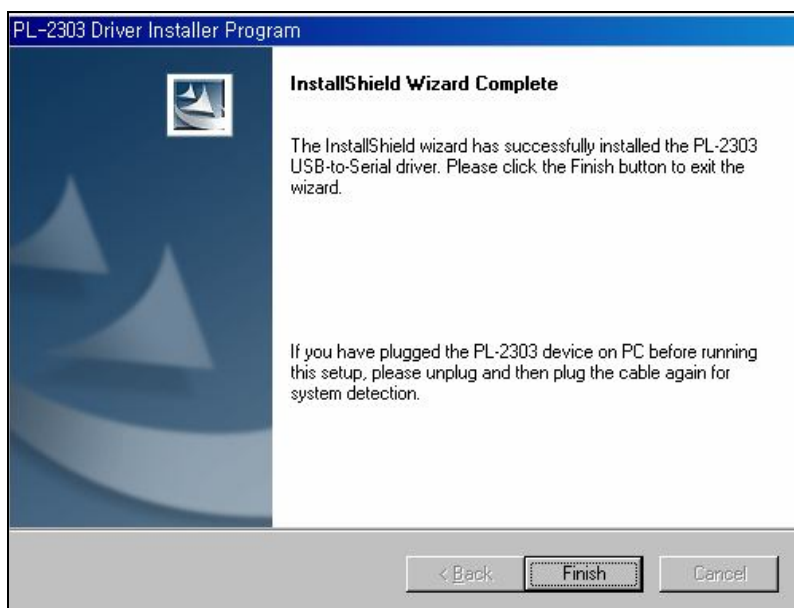
- 9) When the License Agreement appears on the screen, click “I accept the terms of the license agreement” checkbox and click “Next” button



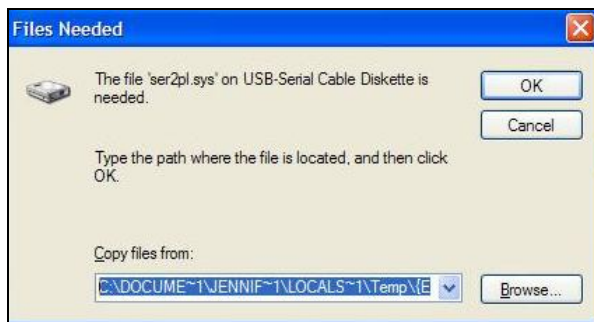
10) The program installation will be processed automatically.



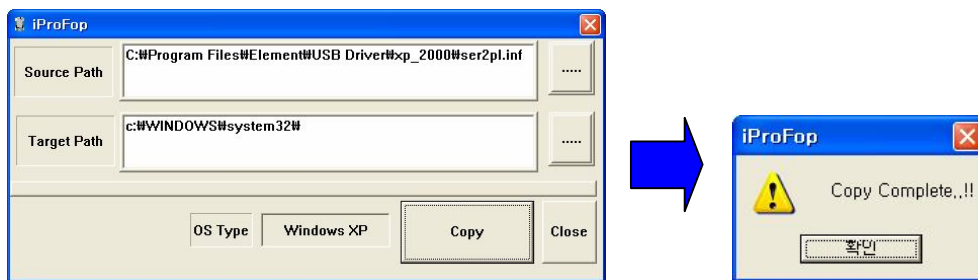
11) If display the install-complete as following, click “Finish” button.



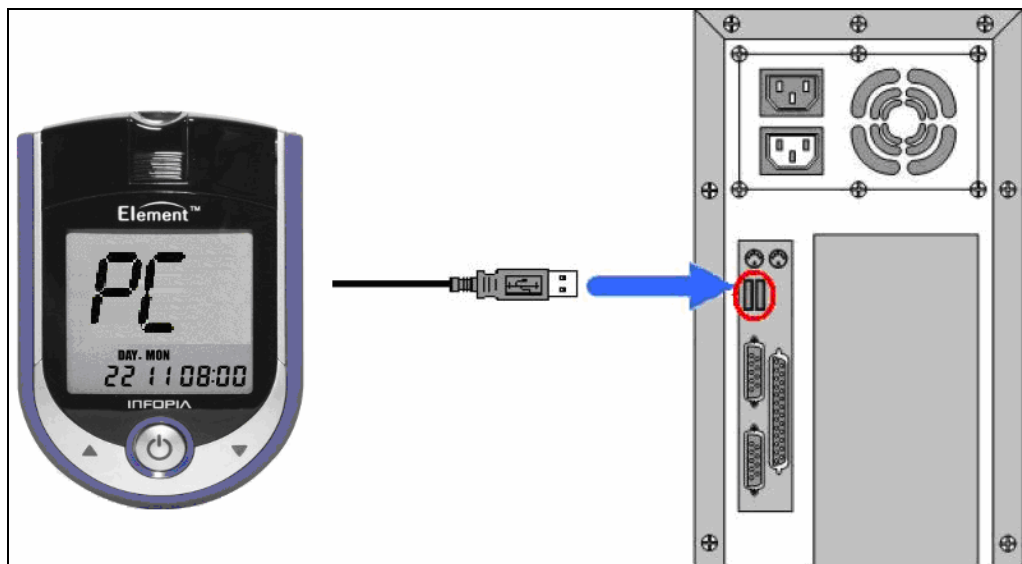
B) If USB-Serial driver file is not found, take the following steps.



- 1) Element Program Uninstall.
- 2) Search or type "C:\Program Files\Element\USB Driver\".
- 3) Execute the "IProFop.exe" from the file.
- 4) If display the IProFop Program, click "Copy" button .



- 4) Connect the ElementTM USB communication cable to your PC or laptop.



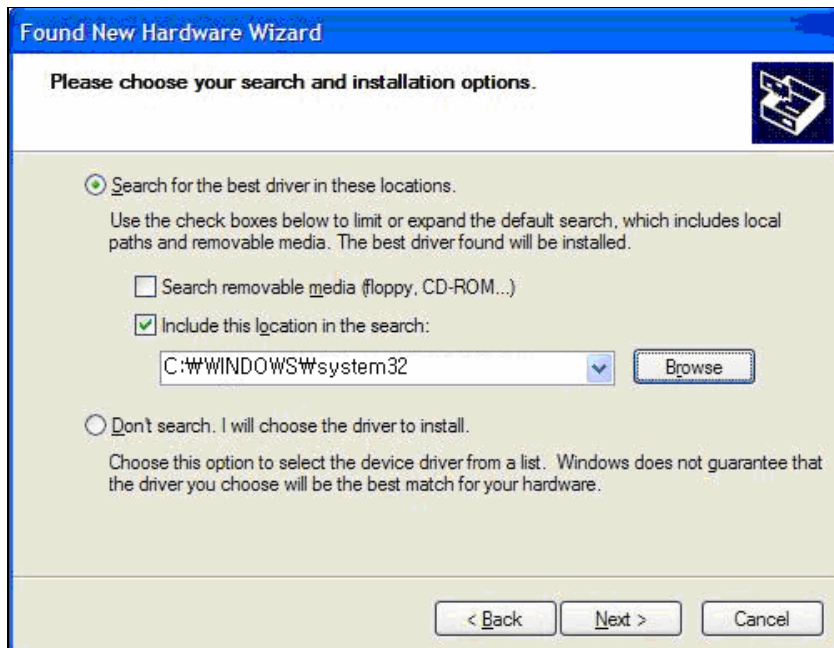
6) Select “Yes, this time only” and click “Next” button.



7) Select “Install from a list or specific location (Advanced)” and click “Next” button.



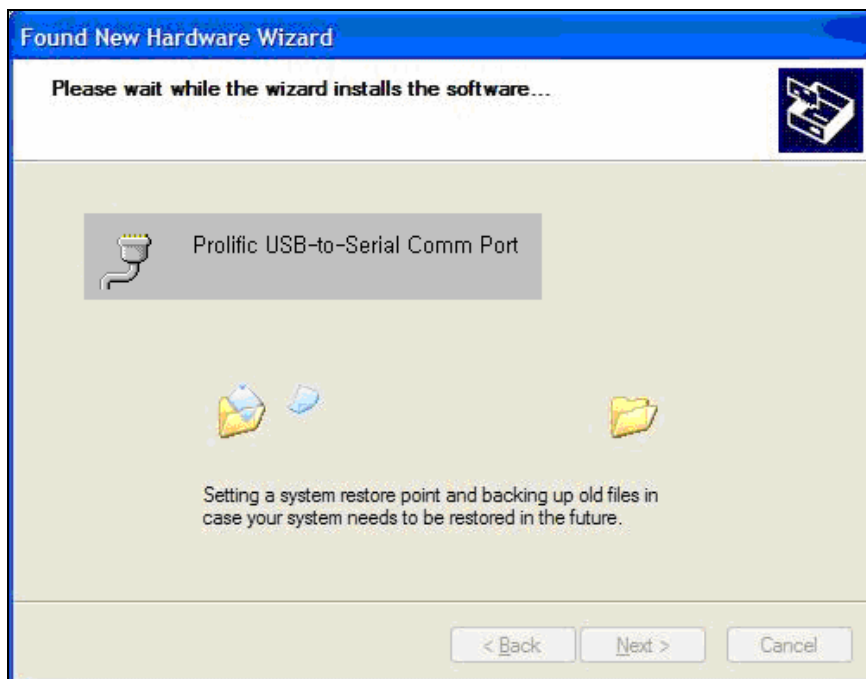
8) Search or type “C:\Windows\system32 ” and click “Next” button.



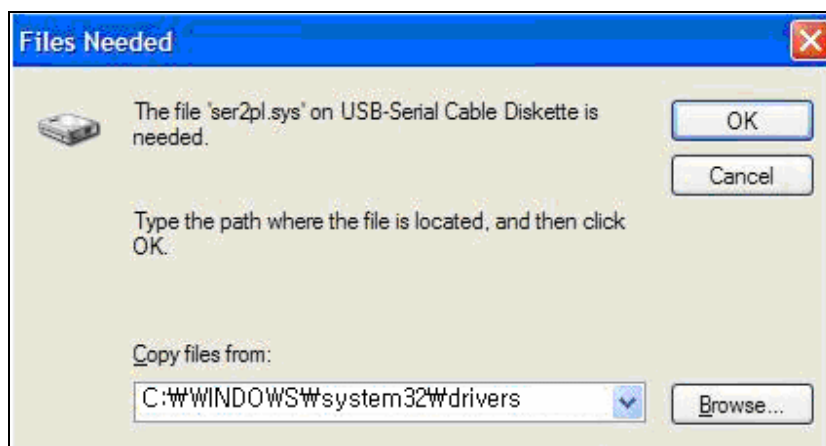
9) If display the warning as following, click “Continue Anyway” button.



10) Wait while the wizard installs the USB software driver.



11) Search or type “C:\Windows\system32\drivers” and click “OK” button.



12) Click “Finish” button.



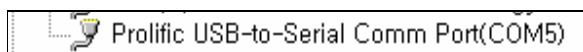
13) Restart your computer.

14) Verification.

[Start] menu – [Program] menu - [Control Panel] menu

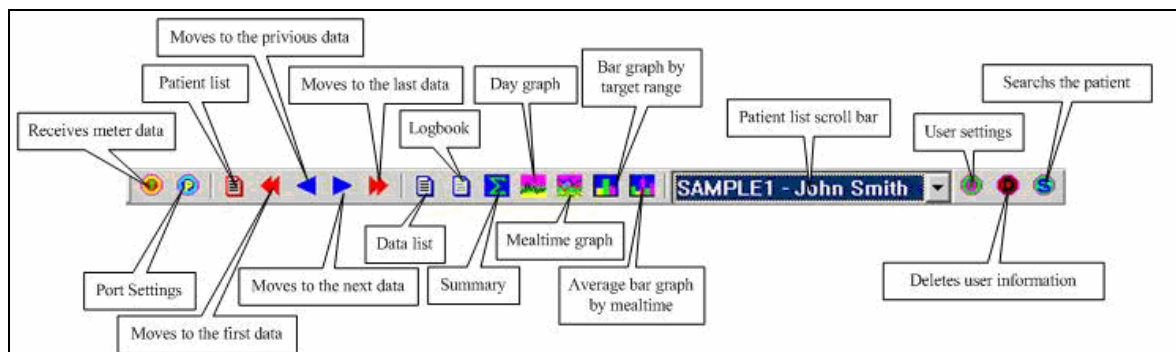
-[System] Icon - [Hardware] tap – [Device Manager] Button

- [Port] tree menu



6. Composition of toolbar

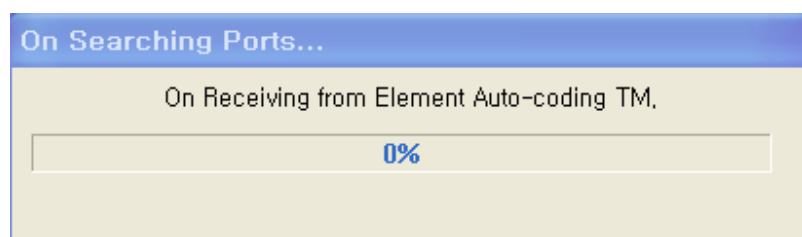
- This program provides a user convenient toolbar, to help you manage the blood glucose easily.



7. Menu Functions

7.1 File[Alt+F]

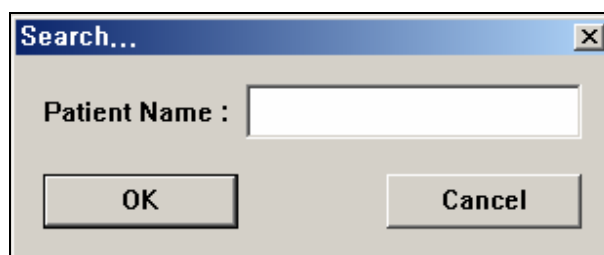
- Receive meter data [R] : to download the stored data from the meter



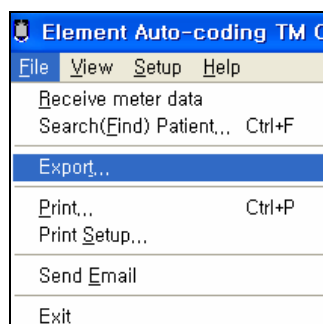
Progress bar during importing data from the meter

After connecting the communication cable to the USB port of the PC and the jack socket of the meter, the meter displays “PC”. Click ‘Receive meter data’ and the data will be downloaded to the PC from the meter. During importing the data, the “On Receiving” box (as shown above) will be displayed, and the computer will show the dialog box of ‘Data List’ indicating that the data is stored with the file extension of ‘gdt’ as in “Patient ID.gdt.”

- Search(Find) Patient [F or Ctrl+F] : to search the patient name



- Export [T or Ctrl+T] : to export the 'CSV' format file.



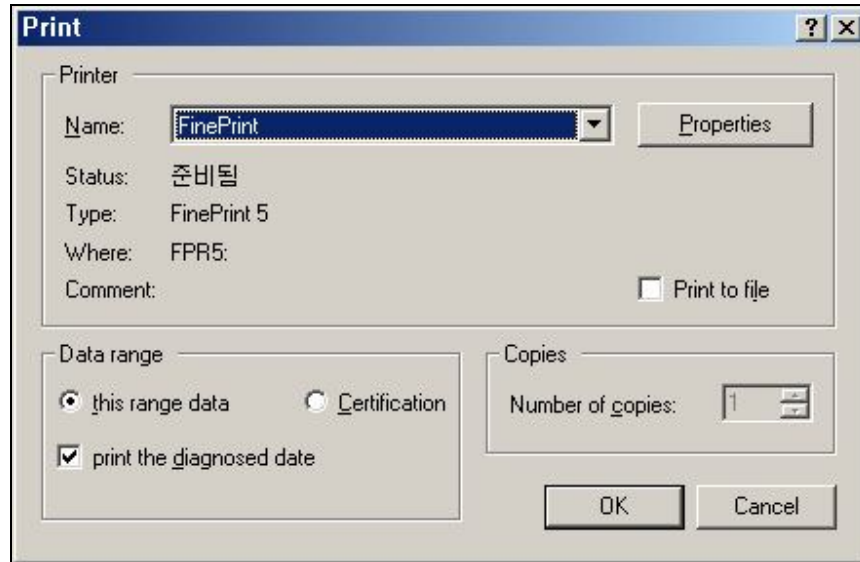
[Patient]
Name: Jones Doe
Sex: Male
DOB: 1976-04-08
Phone:
Mobile:
E-Mail:
FAX:
Address:
Provider:
Mention:
Room No.:
Bed No.:

[Staff]
Name: Brown
Mention:

[Physician]
Name: Johnes
Hospital:
Phone:
Mobile:
E-Mail:
FAX:

| Num ber | Date | Time | Measuring | Tem peratu Icon |
|---------|------------|-------|-----------|-----------------|
| 1 | 2009-01-02 | 8:23 | 123 | 24.1 Blood |
| 2 | 2009-01-02 | 11:41 | 103 | 20.1 Blood |
| 3 | 2009-01-02 | 17:06 | 93 | 22.6 Blood |
| 4 | 2009-01-05 | 8:28 | 133 | 24.1 Blood |
| 5 | 2009-01-05 | 11:30 | 153 | 22.1 Blood |
| 6 | 2009-01-05 | 17:30 | 113 | 24.1 Blood |
| 7 | 2009-01-08 | 8:18 | 112 | 24.1 Blood |
| 8 | 2009-01-08 | 11:09 | 132 | 21.3 Blood |
| 9 | 2009-01-08 | 18:21 | 92 | 23.3 Blood |
| 10 | 2009-01-12 | 8:13 | 143 | 24.1 Blood |
| 11 | 2009-01-12 | 11:29 | 163 | 20.9 Blood |
| 12 | 2009-01-12 | 17:09 | 123 | 23.9 Blood |
| 13 | 2009-01-18 | 7:33 | 130 | 24.1 Blood |
| 14 | 2009-01-18 | 12:21 | 150 | 22.3 Blood |
| 15 | 2009-01-18 | 20:29 | 110 | 24.3 Blood |
| 16 | 2009-01-21 | 8:30 | 128 | 24.1 Blood |
| 17 | 2009-01-21 | 11:28 | 148 | 23.6 Blood |
| 18 | 2009-01-21 | 17:21 | 108 | 25.6 Blood |
| 19 | 2009-01-27 | 8:16 | 126 | 24.1 Blood |
| 20 | 2009-01-27 | 11:18 | 146 | 24 Blood |
| 21 | 2009-01-27 | 17:43 | 106 | 26 Blood |
| 22 | 2009-02-02 | 6:27 | 129 | 24.1 Blood |
| 23 | 2009-02-02 | 12:16 | 149 | 21.8 Blood |
| 24 | 2009-02-02 | 17:03 | 109 | 23.8 Blood |

- ▶ Print [P or Ctrl+P] : to print



- In addition to the basic function of the Windows program, the user can print out the views by setting the range.

- Views

- ① Data list - lists the test results and enables the availability of the correction, addition and deletion of the data
- ② Logbook - reports the average readings by day and by meal time
- ③ Summary - shows the statistics in total or monthly
- ④ Day graph - plots the average readings by day and the user can spot the blood glucose level patterns during the period
- ⑤ Mealtime graph - displays the average results by meal time and it can be distinguished between pre-meal and post-meal

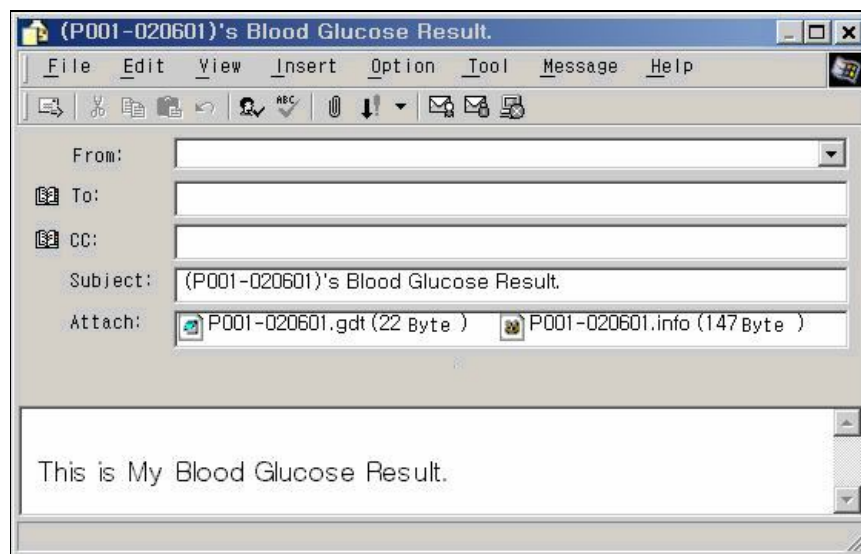
- ⑥ Bar graph by target range – plots all results in three bars which shows below, in and above target range over time
- ⑦ Average Bar graph by mealtime – shows the average readings by mealtime

► Print Setup [S] : to set up printing

- Follows the Windows default setting

- If printer does not work, please make sure whether the printer set-up is installed.

► Send E-mail [E] : to send e-mail



- The mail is automatically ready to be sent from the Outlook program of your PC, with two type files attached. One type of 'gdt' extension and the other with 'info' extension as shown at the picture above.
 - In the case above, it has been set up in the [User Profile] within the program, the patient as the sender and the physician as the receiver respectively.
 - Send E-mail[E] is available when only using Outlook or Outlook Express program.
- Exit [X or Alt+F4]
- Click 'Exit' to close the program.

7.2 View [Alt+V]

- If there are data stored at the data files, each view can be open.
- If not, the screen displays the starting menu.

► Data List [D] : to display the data list

| Number | Date | Time | Icon | Mealtime | Measuring value | Temperature | Level |
|--------|----------------|----------|-------------|------------------|-----------------|-------------|--------|
| 1 | 2007-01-04 Thu | 06:13 PM | Before meal | After Dinner | 54 | 25.8 | Low |
| 2 | 2007-02-25 Sun | 02:37 PM | Do not set | After Lunch | 106 | 23.2 | Target |
| 3 | 2007-02-24 Sat | 07:32 PM | Do not set | Evening | 99 | 22.7 | Target |
| 4 | 2007-02-24 Sat | 01:58 PM | Do not set | After Lunch | 97 | 22.3 | Low |
| 5 | 2007-02-23 Fri | 06:30 PM | Do not set | After Dinner | 122 | 25.1 | Target |
| 6 | 2007-02-23 Fri | 12:51 PM | Do not set | Before Lunch | 140 | 23.3 | High |
| 7 | 2007-02-22 Thu | 07:55 AM | Do not set | Before Breakfast | 154 | 22.5 | High |
| 8 | 2007-02-20 Tue | 07:15 PM | Do not set | Evening | 122 | 29.7 | Target |
| 9 | 2007-02-20 Tue | 01:02 PM | Do not set | After Lunch | 142 | 29.5 | Target |
| 10 | 2007-02-20 Tue | 07:00 AM | Do not set | Before Breakfast | 164 | 29.4 | High |

- In this menu 30 test results are displayed, from newest to oldest.
- The results are color coded to make diabetes management easier:
Yellow indicated a low blood glucose level, green the target range and red the high level.

► Logbook [L] : to view average chart by day and by meal time

Element Auto-coding TM Communication Program - [LOGBOOK]

File View Setup Help

SAMPLE1 - SAMPLE1

| Date | Sleep 12:00 AM ~ 04:59 AM | Breakfast (Before/After) 05:00 AM ~ 10:59 AM | Lunch (Before/After) 11:00 AM ~ 02:59 PM | Dinner (Before/After) 03:00 PM ~ 06:59 PM | Evening 07:00 PM ~ 11:59 PM |
|------------|------------------------------|---|---|--|--------------------------------|
| 2007-01-22 | | | | | |
| 2007-01-23 | | | | | |
| 2007-01-24 | | | | | |
| 2007-01-25 | | | | | |
| 2007-01-26 | | | | | |
| 2007-01-27 | | | | | |
| 2007-01-28 | | | | | |
| 2007-01-29 | | | | | |
| 2007-01-30 | | | | | |
| 2007-01-31 | | | | | |
| 2007-02-01 | | | | | |
| 2007-02-02 | | | | | |
| 2007-02-03 | | | | | |
| 2007-02-04 | | | | | |
| 2007-02-05 | | | | | |
| 2007-02-06 | | | | | |
| 2007-02-07 | | | | | |
| 2007-02-08 | | | | | |
| 2007-02-09 | | | | | |
| 2007-02-10 | | | | | |
| 2007-02-11 | | | | | |
| 2007-02-12 | | | | | |
| 2007-02-13 | | | | | |
| 2007-02-14 | | | | | |
| 2007-02-15 | | | | | |
| 2007-02-16 | | | | | |
| 2007-02-17 | | | | | |
| 2007-02-18 | | | | | |
| 2007-02-19 | | | | | |
| 2007-02-20 | | 164 (164 / 0) | 142 (0 / 142) | | 122 |
| 2007-02-21 | | | | | |

ID of Element Auto-coding

| ID | DATA NUM. |
|----|-----------|
| | |

Attach to this patient's ID

Add new patient

Ready NUM

- shows the average value by day and by mealtime

► Summary [S] : to view statistics

Element Auto-coding TM Communication Program - [SUMMARY]

File View Setup Help

SAMPLE1 - SAMPLE1

Total Summary [mg/dL]

| | |
|--------------------------|-----|
| Total Average | 120 |
| Average Readings Per Day | 114 |
| Standard Deviation | 30 |
| No. of Glucose Readings | 10 |
| Measuring days | 6 |
| Highest Blood Glucose | 164 |
| Lowest Blood Glucose | 54 |

A Month Summary [mg/dL]

| | |
|--------------------------|-------------------------|
| Term | 2007-01-22 ~ 2007-02-21 |
| Average | 142 |
| Average Readings Per Day | 142 |
| Standard Deviation | 17 |
| No. of Glucose Readings | 3 |
| Measuring days | 1 |
| Highest Blood Glucose | 164 |
| Lowest Blood Glucose | 122 |

Readings/Range [mg/dL]

| Division | Ranges | Number | Percent |
|------------------|------------------|--------|---------|
| High [Total] | 121(156)~600 | 3 | 30% |
| Target [Total] | 65(100)~120(155) | 5 | 50% |
| Low [Total] | 0~ 64(99) | 2 | 20% |
| High [A Month] | 121(156)~600 | 1 | 33% |
| Target [A Month] | 65(100)~120(155) | 2 | 66% |
| Low [A Month] | 0~ 64(99) | 0 | 0% |

A Month Summary by Mealtimes [mg/dL]

| Time Range | Average | Std. Dev. | Number |
|---------------------|---------|-----------|--------|
| 12:00 AM ~ 04:59 AM | 0 | 0 | 0 |
| 05:00 AM ~ 07:59 AM | 164 | 0 | 1 |
| 08:00 AM ~ 10:59 AM | 0 | 0 | 0 |
| 11:00 AM ~ 12:59 PM | 0 | 0 | 0 |
| 01:00 PM ~ 02:59 PM | 142 | 0 | 1 |
| 03:00 PM ~ 04:59 PM | 0 | 0 | 0 |
| 05:00 PM ~ 06:59 PM | 0 | 0 | 0 |
| 07:00 PM ~ 11:59 PM | 122 | 0 | 1 |

ID of Element Auto-coding

| ID | DATA NUM. |
|----|-----------|
| | |

Attach to this patient's ID

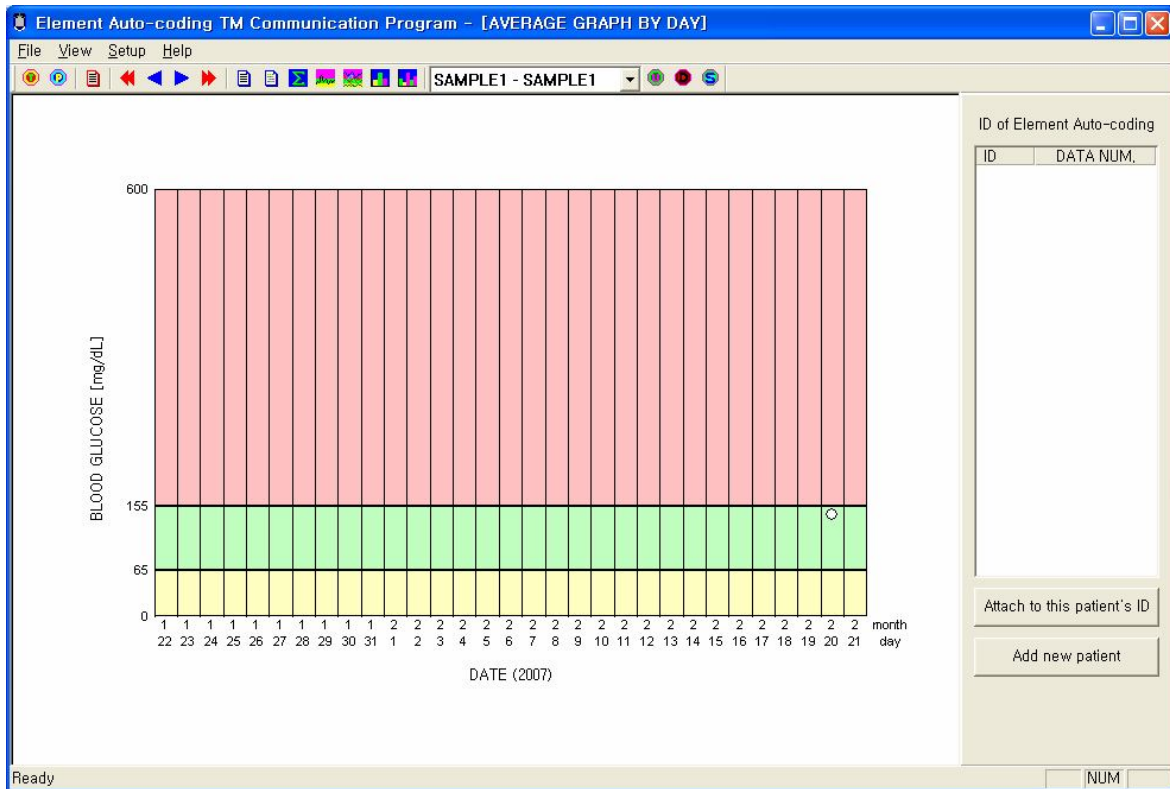
Add new patient

Ready

NUM

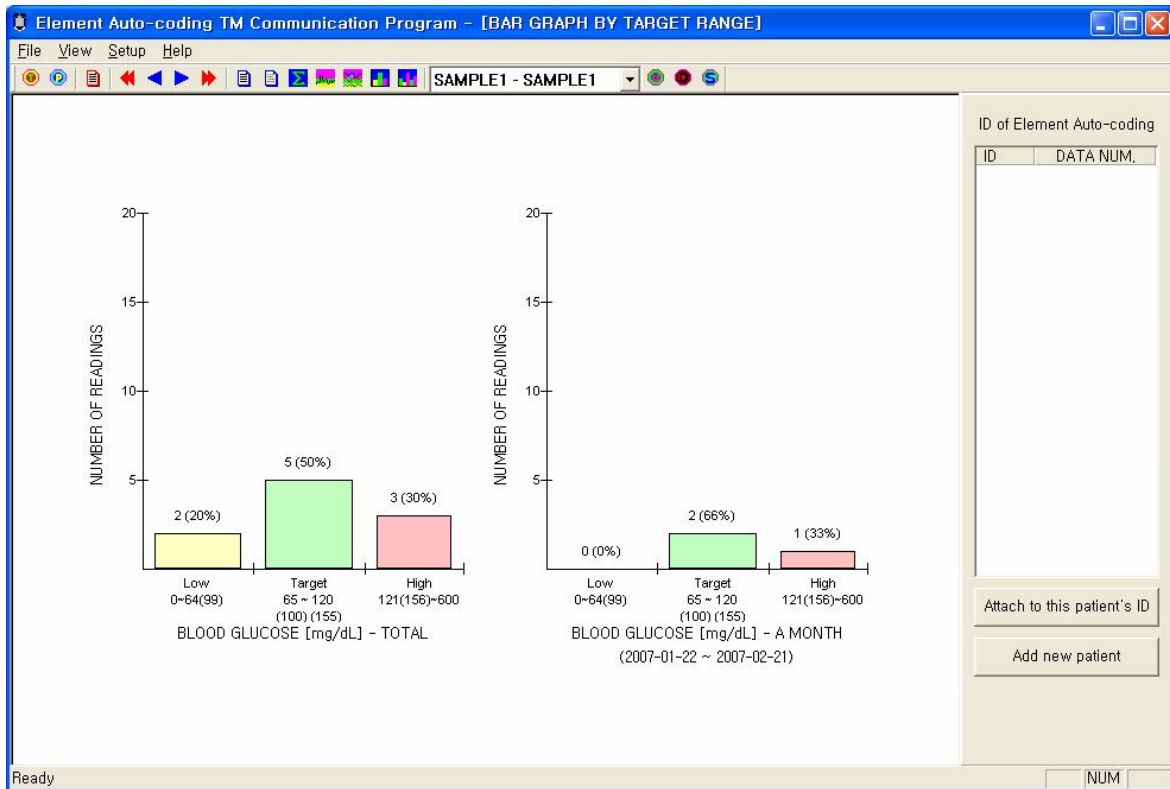
- Shows the statistical summary in total, by month, by measuring range and by mealtime.

- Day graph [G] : to view the average change by day



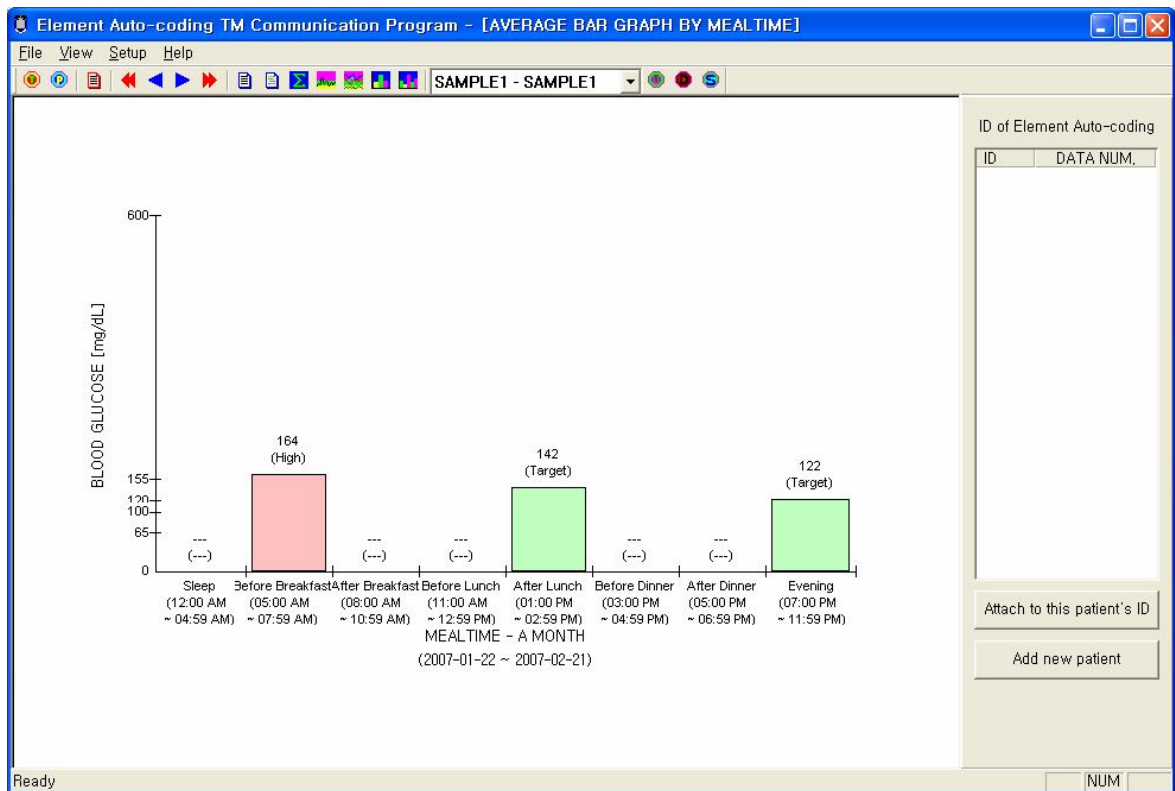
- Displays the average by day in one month graph.

► Bar graph by target range [B]



- Displays three bars which are the low range, target range and high range respectively in total and by month.

► Average bar graph by mealtime [A]



- Displays the statistics graph by mealtime.

7.3 Setup [Alt+S]

► User Settings [U]

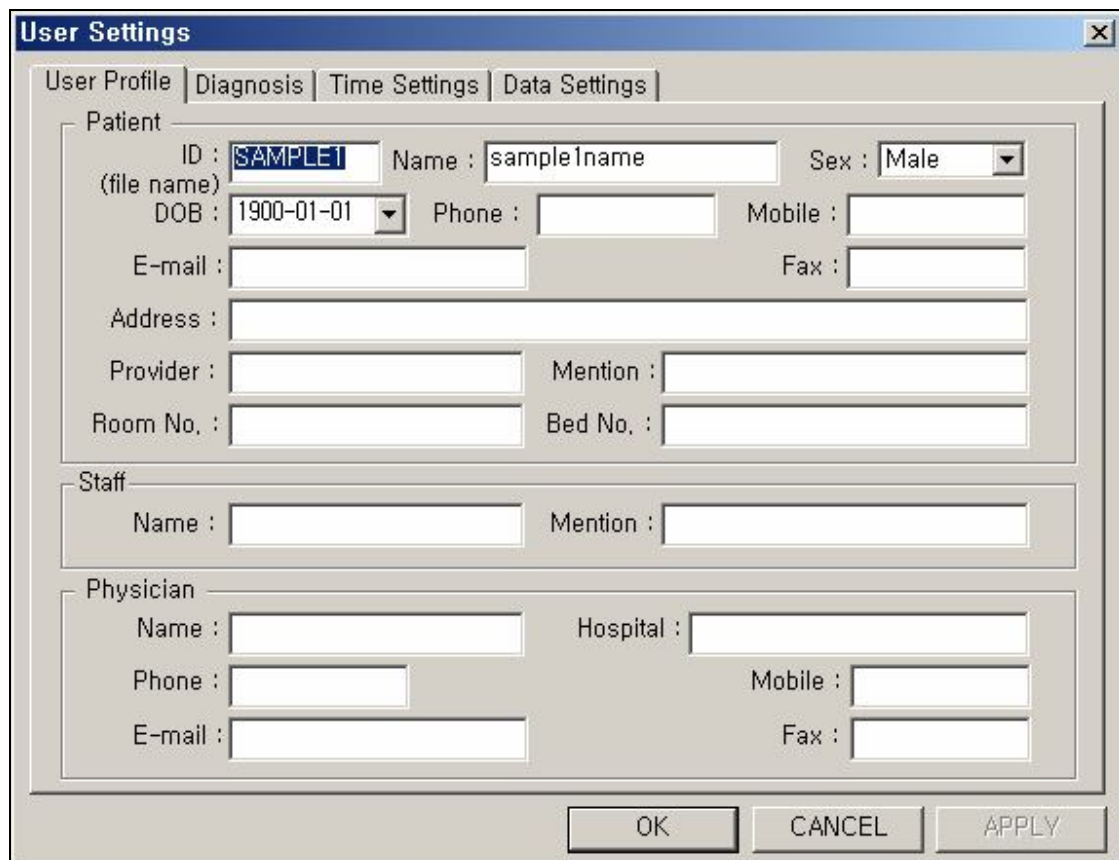
• User Profile

- Fill in the patient's and the physician's profiles

- Stores the data at the 'info' file.

>> Patient ID can be the file name of both 'gdt' and 'info.'

>> E-mail addresses can be used when the user commands 'Send E-mail'.



The image shows a 'User Settings' dialog box with a blue title bar and a close button (X). It contains four tabs: 'User Profile', 'Diagnosis', 'Time Settings', and 'Data Settings'. The 'User Profile' tab is active. It is divided into three sections: 'Patient', 'Staff', and 'Physician'. The 'Patient' section includes fields for ID (with '(file name)' below it), Name, Sex (a dropdown menu set to 'Male'), DOB (a date picker set to '1900-01-01'), Phone, Mobile, E-mail, and Fax. There is also a single-line 'Address' field. The 'Staff' section has fields for Name and Mention. The 'Physician' section has fields for Name, Hospital, Phone, Mobile, E-mail, and Fax. At the bottom of the dialog are three buttons: 'OK', 'CANCEL', and 'APPLY'.

| Section | Field | Value |
|-----------|----------------|-------------|
| Patient | ID (file name) | SAMPLE1 |
| | Name | sample1name |
| | Sex | Male |
| | DOB | 1900-01-01 |
| | Phone | |
| | Mobile | |
| | E-mail | |
| | Fax | |
| Address | | |
| Staff | Name | |
| | Mention | |
| Physician | Name | |
| | Hospital | |
| | Phone | |
| | Mobile | |
| | E-mail | |
| | Fax | |

- Diagnosis

- Allows the physician to make treatment recommendations by email.

>> The physician sends the diagnosis to the patient by email, based on the data downloaded from the meter.

The image shows a 'User Settings' dialog box with four tabs: 'User Profile', 'Diagnosis', 'Time Settings', and 'Data Settings'. The 'Diagnosis' tab is active. It contains two main sections: 'Diagnosis' and 'Treatment'.

Diagnosis Section:

- 'Type of Diabetes' is a dropdown menu with 'Type I' selected.
- 'Diagnosed Date' is a date picker showing '2002-01-01'.
- 'Complications' is a single-line text input field.
- 'Comments' is a multi-line text area.

Treatment Section:

- There is a list of checkboxes for treatment types: 'Diet', 'Exercise', 'Insulin injection', 'Insulin pump', 'Oral Medicine', and 'Other'. All are currently unchecked.
- 'Comments' is a multi-line text area.

At the bottom of the dialog are three buttons: 'OK', 'CANCEL', and 'APPLY'.

- Time Settings

- Here, you can set up the date and time displaying format and mealtime.

User Settings

User Profile | Diagnosis | **Time Settings** | Data Settings

Date Format: ☒ yyyy-MM-dd ☐ MM/dd/yyyy

Time Format: ☐ 12 Hours ☒ 24 Hours

Mealtime Settings

☒ Separate Before/After Meals

| Meal Time | Subdivision | From [Time] | To [Time] |
|-----------|-------------|-------------|-----------|
| Sleep | | 00:00 | 04:59 |
| Breakfast | Before | 05:00 | 07:59 |
| | After | 08:00 | 10:59 |
| Lunch | Before | 11:00 | 12:59 |
| | After | 13:00 | 14:59 |
| Dinner | Before | 15:00 | 16:59 |
| | After | 17:00 | 18:59 |
| Evening | | 19:00 | 23:59 |

OK CANCEL APPLY

- Data Settings

- You can set up the measuring unit, the temperature settings, icon settings and the target range.

User Settings

User Profile | Diagnosis | Time Settings | **Data Settings**

Units Settings

☒ mg/dL
☐ mmol/L

Temperature Settings

☒ Centigrade
☐ Fahrenheit

Icons Settings

☒ display control solution result
☐ do not display c, s, result

Target Ranges

| Target | From [Units] | To [Units] |
|------------------|--------------|------------|
| Before each meal | 65 | 120 |
| After each meal | 100 | 155 |
| Overall Range | 65 | 155 |

OK CANCEL APPLY

※ Patient ID is the file name.

7.4 Help [Alt+H]

- About ElementTM Communication Program [Alt+A]

