



# SmartLog™ User's Manual

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SmartLog User's Manual

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#### Symbols used in the manual

	Warning Indicates that there is a possibility of death, injury or a serious adverse event may occur to the user if the instructions provided are not followed with proper medical guidance of a physician.
!	Caution Indicates that there is a possibility of injury to the user or damage to the device if the instructions provided are not followed without proper medical guidance.
	<b>Note</b> Indicates additional or background information that may be helpful to the user.

#### General Terminology

Click		Click the left button on the mouse once.
Double Click	-	Quickly press the left button on the mouse twice.

#### **Description of Symbol**

C€	This product fulfills the requirements for Directive 98/79/EC/ on in vitro diagnostic medical devices.
Ĩ	Consult instruction for use
<b>~~</b>	Manufacturer
EC REP	Authorized representative





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#### 1. Before You Start

1.1 User's Manual Introduction

This manual provides quick and simple answers to questions you may have regarding the use of the software, and solutions to problems you may encounter during its use. SmartLog Diabetes Management Software allows diabetic patients to download the data to the program. i-SENS blood glucose meter and data cable are used to download the data. (Read 3.3 Download Data) Please refer to the user manual of the meter before you use it. SmartLog Diabetes Management Software helps healthcare professional and patients with diabetes to track and monitor their blood glucose levels and related data, through graphs and other software tools. SmartLog provides helpful information for patients to control their glucose.

## 

Do not decide on your treatment method using the data provided by SmartLog alone. Any course of medical treatment should be pursued only after a diagnosis by a healthcare provider. Before a treatment method is selected, both the user and their healthcare provider should understand how the statistical data is made by SmartLog.



This SmartLog software saves health-related data on your computer. It is recommended to ensure that you have an up-to-date security software on your computer.



#### Note

SmartLog works with i-SENS blood glucose monitoring systems except CareSens POP and CareSens N Mini.





1.2 View User's Manual Guide

The User's Manual is designed as a PDF file. To view or print a file in PDF format, you will need Adobe<sup>®</sup> Acrobat<sup>®</sup> Reader 6.0 or higher version, a free application provided by Adobe<sup>®</sup> Systems. The PDF format makes it easy for the user to find the required content in an interactive fashion while using SmartLog. You may also choose to print the entire User Manual, or selected sections for future reference. Once the PDF file is opened, you can control the viewing and printing of the User Manual through the Adobe<sup>®</sup> Acrobat<sup>®</sup> Reader.

1.3 Introduction to SmartLog

SmartLog is a Diabetic Management Software that helps patients with diabetes to track and monitor their blood glucose levels through graphs, statistics and other software tools using glucose monitor developed by i-SENS, Inc.

- 1.4 System Requirements
- · CPU: 300 MHz Intel Pentium II or higher
- · RAM: 128 MB or higher
- · Minimum free hard disk space: 200 MB
- Windows<sup>®</sup> XP Home, Professional (SP2 or above), Windows<sup>®</sup> Vista (32-bit/64-bit), Windows<sup>®</sup> 7 (32-bit/64-bit) or Windows<sup>®</sup> 8 (32-bit/64-bit)
   MAC OS X 10.7.0 or later
- · USB port
- · SmartLog USB cable or Mini-USB cable
- $\cdot$  Mouse and Keyboard for data entry and menu selection
- Video monitor and adapter with at least 1024x768 pixel screen resolution and 256 colors
- · Printer to print report
- · Internet connection to send email



#### Note

In this manual, MS Windows based OS is named 'PC' and Mac based OS is named 'MAC'.





#### 2. Program Install & Uninstall

- 2.1 Install SmartLog
- 2.1.1 PC(Windows) Version

Double click Setup file (setup.exe), install screen will automatically display.

Application Inst	
	SmartLog
	Description
	i-SENS, Inc.
А	Installation Preferences
	Add shortcut icon to my desktop
	Start application after installation
В	Installation Location:
	C:\Program Files
	Continue Cancel

Displayed Item		Description
A.	Install Setting	After installing, you can add Shortcuts to the Desktop and set up to automatically run the program.
В.	Install Location	Displays the install location. To change the location, click on the folder icon

Click the "Continue" button to continue the installation. Screen will appear as shown below and installation will continue.

Application	Install	
	SmartLog	
	Installing application	
	Cancel	

Click 'Cancel' to cancel the installation.





When installation is completed, the following will be displayed.

FTDI CDM drivers	×
	FTDI CDM drivers         Click 'Extract' to unpack version 2.08.28 of FTDI's Windows driver package and launch the installer.         www.ftdichip.com         < Back       Extract       Cancel

To install the cable driver, click 'Extract' and the following will be displayed.

Welcome to the Device Driver Installation Wizard! This wizard helps you install the software drivers that some computers devices need in order to work.	Device Driver Installation Wiza	rd
To continue, click Next.          < Back       Next >       Cancel		Welcome to the Device Driver Installation Wizard!         This wizard helps you install the software drivers that some computers devices need in order to work.         To continue, click Next.

To continue to install, click "Next".





Installation will proceed and the following will be displayed.

Device Driver Installation Wizard		
	Completing the De Installation Wizard	evice Driver d
	The drivers were successfully in	stalled on this computer.
	You can now connect your dev came with instructions, please re	ice to this computer. If your device ead them first.
	Driver Name	Status
	FTDI CDM Driver Packa     FTDI CDM Driver Packa	Ready to use Ready to use
	< <u>B</u> ack	Finish Cancel

Click 'Finish' to complete installing.



#### Note

After installing the driver, when SmartLog cable is initially connected to (the) USB port of the user's PC, the message shown below will appear in the bottom right corner of the screen.



When installed, the message will display as below. Please wait to connect to SmartLog until this message appears.









#### Note

When the SmartLog installation is completed in Windows ® XP, the following pop-up window will run. Uncheck the current user's "Protect my computer and data from unauthorized program activity" and click "OK" to proceed to SmartLog driver installation.

Run As	X	
	unt do you want to use to run this program?	
Current user (HSHAN-SE9252E57 WAGMINIStrator)     Protect my computer and data from unauthorized program activity		
This option can prevent computer viruses from harming your computer or personal data, but selecting it might cause the program to function improperly.		
◯ The following user:		
User name:	🖸 Administrator 🛛 💽	
Password:		
	OK Cancel	

\* Pop-up window will run twice. Uncheck and click "OK" twice to install the SmartLog driver.





2.1.2 MAC Version

Double click the setup.dmg file to create Install SmartLog folder. Double click the Install SmartLog in the Install SmartLog folder and the screen will appear as below.

000	Application Install
	SmartLog
	A Installation Preferences
	✓ Start application after installation
	$\mathbb{B}$ Installation Location:
	/Applications
	······································
	Cancel Continue

Displayed Item		Description
Α.	Install Setting	After installing, you can set the setting to automatically run the program.
В.	Install Location	Displays install location. To change the location, click on the folder icon

Click the "Continue" button to continue the installation.

Screen will appear as shown below and installation will continue.

000	Application Install
	SmartLog
	Installing application
	Cancel

Click 'Cancel' to cancel the installation.





When installation is completed, the following will be displayed.

	osascript wants to make changes. Type your password to allow this.
	Name: John Doe
	Password:
?	Cancel

Enter the password and click the 'OK" button to complete the driver installation.

#### 2.2 Uninstall SmartLog

#### 2.2.1 PC(Windows) Version

To uninstallSmartLog, run Control Panel and Add/Remove Program. From the Add/Remove Program list, click on SmartLog Uninstall.



The methods to run Control Panel, and Add/Remove program are different depending on the Windows version. Please refer to the method of the appropriate Windows version in use.

#### 2.2.2 MAC Version

Open the 'Application' menu, right click on the SmartLog icon, and click the "Move to Trash' menu.

Applications		
Q		
selected, 10.85 GB availa	able —	
	Open Show Package Contents	
SmartLog	Move to Trash	





#### 3. SmartLog User's Manual

3.1 Run SmartLog

For the Windows version, double click the SmartLog shortcut icon from the screen.



For the MAC version, open the Application menu and double click the SmartLog icon.



After completion of installing SmartLog, The screen shown below will initially appear.







Displayed Item		Description		
Α.	Home	Go to home page.		
В.	User	You can register the new user or manage existing user information.		
C.	View Report	You can view various reports, print, and send the reports via email.		
D.	Data Management	You can view the reports as pdf, jpg, xls, and csv file format and load the xls, csv files to save on SmartLog. (pdf and jpg files cannot be loaded) You can also backup and restore Smartlog data.		
E.	Print Report	You can print various reports.		
F.	Send Email	You can send emails of various reports.		
G.	Current Time	It shows the current data and time.		
Н.	Average 14 Days	It shows the average glucose data for the latest 14 days of the selected user.		
Ι.	Download Data	You can download the data from the meter		
J.	Manual Entry	User can manually enter the data.		
К.	View Report	You can view various reports, print, and send the reports via email.		
L.	User List	It shows the list of registered users. It shows the Name, Gender, Date of Birth and the user can be switched by clicking on the arrow next to the user information.		
M.	User Search	You can move to Account Settings		
N.	Minimize	You can minimize the program screen.		





O. Maximize	You can maximize the program screen.	
P. Exit	You can exit the program.	
Q. Setting	You can edit the Date format, Glucose unit, and Target setting. You can edit the Date and Time of the meter.	
R. Help	You can view the User's Manual in pdf file format. You can directly connect to the Adobe Reader download website if Adobe Reader is not installed yet.	





3.2 User

User menu has total 4 options including User Profile, Health Management, Test Schedule and Account Settings.

#### 3.2.1 User Profile

In the User menu, User Profile is initially selected and the screen shown below will appear.

<b>SMAP</b> Diabetes Mana	RTLOG John Doe   Male	1970/01/02 <b>v</b> O <b>O O O</b>
Home	User Profile Health Manag	gement Test Schedule Account Settings
A	Basic Information	B Medical Information
	*Name John Doe	Name of Doctor
	John Doe	Email
<u>nin.</u>	*Date of Birth 1970 1 2 2	Name of Hospital
View Report	*Gender   Male  Female	Insurance Number
Data Management		Set Favorites OR Bookmark  Trend Graph  Average Analysis
Print C	Meter Serial #	Daily Trend Target Analysis Period Comparison Logbook
Send Email		E Track Health Information Save
	Bens © 201	3 All rights reserved.

You can enter User information to register and edit information. You cannot continue without entering the Name, Date of Birth and Gender.

You can either register the user information after you download the data or from the Account Settings menu.

Displayed Item		Description	
Α.	Basic	This information is required to register the new user and	
	Information	cannot be edited after it is saved.	
	(required)		
В.	Medical	You can enter/edit the Name of Doctor, E-mail, Name of	
	Information	Hospital and others.	
С.	Meter	You can manage the serial numbers of your meters.	
	Serial Number	User can register up to 5 different meters. Click the	
		trash can icon next to the serial number to delete the	
		registered serial number.	

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	A0A000A00012
D. Set to Favorites	You can manage the print options for the reports The reports will be automatically printed if the reports are checked and attached to emails when sending emails.
E. Track Health Information	You can record, edit and save the health examination result. Click the 'Write' button to record the result.
	Select Date       2013/09/03         Height       180 cm         Weight       71 kg         BMI       21.91 kg/m²         Waist Size       cm         HbA1c       %         Bkod Pressure       / / mmHg         Total Cholesterol       mg/dL         LDL Cholesterol       mg/dL         HDL Cholesterol       mg/dL         Kote       Cancel
	To change the date, click the icon next to the date and choose the date. 2013/09/03 S M T W T F S 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 Enter the information and click the 'Save' button. Click
	the 'View' button to view and/or edit the saved information.



Click the 'Save' button to save the entered or edited information.





#### 3.2.2 Health Management

Click 'Health Management' and the following screen will appear.

<b>SMA</b> Diabetes M	ART LOC	John Doe   Male   1970/01/02	
Home	User Profile 🗄 Health Management 🛗 Test Schedule 🌊 Account Settings		
•	A Height	180 • cm _ ft	
User	Weight	71 🖲 kg 🔿 lb	
al.	BMI	21.91 kg/m <sup>2</sup>	
View Report	B Type of Diabetes	• • Type-2 Type-1 Gestational Others Time of Diagnosis 2013/10/10	
	C Insulin	NO OYES Starting Period 2013/10/10	D
Data Management		Rapid-acting V Humalog Add Lantus	Θ
_		Direct input Add	
Print	E Oral Medication	NO YES Starting Period 2013/10/10	
	Diet	● NO YES	Save
Send Email	Exercise	● NO YES	Cancel
(		Bens © 2013 All rights reserved.	<b>‡</b> 🕄

Displayed Item	Description		
A. BMI	Height can be entered in cm or ft and Weight can be entered in kg or lb. Data will (be) automatically be converted if you change the unit. BMI will be automatically calculated when you enter your Height and Weight.		
B. Diabetes Types	You can select the Diabetes Types and enter the Time of Diagnosis.		
C. Add Insulin	Users can record additional types of insulin they are using. Check 'Yes' on the Insulin Usage in order to add additionaltypes of insulin. Insulin ONO OYES Click the arrow from the Insulin List and choose the type of insulin. Then, click the arrow from the Medication List and choose the medication name in use.		





		Rapid-acting Rapid-acting	
		Regular	Humalog
		Long-acting	Humalog
		NPH	Apidra
		Mixtype	Novorephid
		To add the sele	ected Medication, click the first 'Add'
		If your insulin is write the name of	not on the list, click the 'Manual Entry', of the insulin and click the second 'Add'
		button.	
		Lantus	Add
D.	Insulin List	Name of the insulin will be displayed. Name of the insulin	
F	Additional	You can select t	he Oral Medication Diet and Evercise
L.	Information	options.	The oral medication, Diet and Exercise

Click the 'Save' button to save the entered or edited information.





#### 3.2.3 Test Schedule

Click the 'Test Schedule' (menu) and the following screen below will appear.

<b>SMA</b> Diabetes Ma		<b>OG</b> ftware	Johr	n Doe   N	ale   1970/0	1/02		<ul> <li>▼ 0,</li> </ul>	• • •
Home	Use Use	er Profile	Ē	Health M	anagement	Test S	chedule	Act	count Settings
	A SUN	Check I	Non-Working MON	Days TUE	: WE	ED 🔲	тни	FRI	SAT
	B Slot	Workin	g Day Time S From	Setting	īo Slot	Non-Working	) Day Time Setti From	ing To	
View Report	Before Breakfast	AM 🍦	06	00 🖨 AM	09:00 Before Breakfa	e AM	06 🔷: 00	AM09:00	
	After Breakfast Before	AM 🍦	09	00 🖨 PM	11:00 After Breakfa	AM	09 (a): 00 (a)	AM11:00	
Data Management	Lunch After Lunch	PM 🖨	02	00 🔷 PM0	05:00 Lunch		02 : 00	PM05:00	
Print	Before Dinner	PM 🍦	05 🚔:	00 🖨 PM0	08:00 Before Dinne	PM 🖨 🔿	05 🔷: 00	PM08:00	
	After Dinner Before	PM 🖨	08 🖨:	00 🖨 PM	11:00 After Dinne			PM11:00	Save
Send Email	Sleep Dawn	AM 🔶	02 4:	30 🖨 AM	06:00 Dawr		02 4: 30	AM06:00	Cancel
				Bens (	© 2013 All rights res	erved.			\$ <b>?</b>

SmartLog manages the data using the meal and sleep time. Time schedule for meal and sleep time can be selected for both Working and Non-working days.

Displayed Items		Description
Α.	Select Non- Working Days	You can customize the Working Days and Non-Working Days. Check the check box next to the days for the Non-Working days.
Β.	Working Day Time Setting/ Non-Working Day Time Setting	You can customize the start and end time for meal and sleep time. Click the Up and Down arrow button to customize the time ranges. (unit: ten minutes) Before AM © 06 ( AM09:00 If the start time is changed, the end time will automatically change. The start and end time is set with the minimum of 10 minute intervals.

Click the 'Save' button to save the entered or edited information.





### 

• Make sure to set the time in your meter to match the current time on your PC. If the time setting is wrong, the data can be erroneously analyzed.



 If any of the schedule doesn't match, the blood glucose data in SmartLog may be displayed in an inappropriate meal slot and cause a production of a report based on erroneous data information. If data appears in an inappropriate meal slot and falls out of the target range, you may misinterpret the information when tracking and organizing data. All data in the before-breakfast through bedtime meal slots will be displayed sequentially with the date of the before-breakfast start time. This includes data that may be recorded after midnight.





#### 3.2.4 Account Settings

In 'Account Setting', you can register a new user and delete/search for a user.

Click the 'Account Setting' tab and the following screen below will appear.

<b>SMA</b> Diabetes M	ARTLOG anagement Software	John Doe   Male   1970/0	1/02	<b>•</b> (	
Home	User Profile	Health Management	Test Schedule	ÇZ.	Account Settings
User	Name	Enter Name	Search E		
View Report	John Doe	Name	Date of Birth 1970/01/01	Gender Male	Insurance Number
Data Management					
Print					
Send Email					
		Cons © 2013 All rights res	erved.		<b>‡</b> ?

Displayed Item	Description
A. Search Option	This is the current User Search Option. The standard search option is Name and you can change the search option to Date of Birth. To change the Search Option, Click the bottom arrow and choose the Search Option.
B. Entry Field	Enter information to search. If the Search Option is changed to Date of Birth, this field changes to Date Selection menu Search Date of Birth  Year  Month  Year  Month  To start the search, click the 'Search' button.
C. User List	Registered user list will appear. When the Search tool is run only the searched user is displayed. Click the User List to see the User Profile screen.

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D. Remove User	You can remove the registered user information and data. Click the checkbox next to the user name and click the 'Remove User' button
E. Add User	You can register a new user. Click the 'Add user' button to register information.





3.3 Download Data

You can download the glucose data from the meter to PC or MAC.



You need to use the Data Cable to connect the i-SENS meter to PC or MAC. Depending on the user's meter, SmartLog cable may be required. Connect the end of the cable to the (A) USB port of PC or MAC and the other end of the cable to (B) the meter's communication port.



A. Connect to USB port



B. Connect to meter's communication port

Click 'Download Data' and the following screen below will appear.



Connect the meter to PC or MAC with the USB cable and turn on the meter.





Click the 'USB' button when the meter shows 'Pc' on the screen.





You cannot test or use the memory function of the meter while it is connected to PC or MAC. Do not test the meter while the meter is connected to PC or MAC.

When the meter is successfully connected, Download Data will start. Download Data Screen will show the progress from 0~100% as shown below.





Note

When the meter is not connected to PC or MAC, the connected meter will not turn on, or 'Pc' is not displayed while the power is on, the following screen will appear as shown below.



If this screen is displayed, Click the "OK' button and close the window. Reconnect the meter, turn on the meter, and Download Data after 'Pc' is displayed.





Caution

While you are downloading the meter data, do not remove the SmartLog USB cable from your PC or your meter.

When the progress shows 100%, the screen will show the number of downloads and the list of the data.

Num	ber of Downloads : 50	00
Date	Time	Glucose (mg/dL)
2012/01/01	19:30:00	149
2012/01/01	19:29:00	148
2012/01/01	19:28:00	147
2012/01/01	19:27:00	146
2012/01/01	19:26:00	145
2012/01/01	19:25:00	144
2012/01/01	19:24:00	143
2012/01/01	19:23:00	142

To end the Download Data, Click the 'OK' button.

If the meter is already registered, progress on to View Reports. If the meter is not registered yet, the following screen will appear as shown below.

Data Download	⊗
Meter is connected for the first time. Automatically move to User Profile	
ОК	

To register a new user, Click the 'OK' button. Please refer to 3.2.1 User Profile on how to register a new user.

To add a serial number of the meter to an already registered user, click the arrow button next to 'Add New User' and select the user name.



### Caution

If a new user is not registered or serial number of the meter is not added, the downloaded data will not be saved.





3.4 View Reports

Click "View Reports" and View Reports screen will appear. Click 'View Reports' and the following screen below will appear.

A View Report	В	
Trend Graph	Recent 14 days 🔻 2013/09/27 👻 - 2013/10/10	Apply

While viewing the current report, different type of reports can be viewed. You can also view the same report on a different range of days and you may print and send the reports by email.

Displayed Item	Description
A. Type of Reports	It displays the selected type of Reports. Click the bottom arrow button and choose the type of a different Report to view. Trend Graph 24 Average Analysis Daily Trend 24 Average Analysis 24 Target Analysis 25 Target Analysis 26 Target Analysis
B. Range of Days	It displays the selected Day ranges. Click the bottom arrow button from the list and select the Day Ranges or set it to Select Ranges to customize. Click the bottom arrow button to change the days. It will show the calendar to choose the start and end day. Recent 1 day Recent 1 day Recent 3 days Recent 3 days Recent 3 days Recent 4 days Recent 3 days Recent 4 days Recent 4 days Recent 9 days
C. Send Email	You can send the report shown on the screen via email.
D. Print Report	You can print the report shown on the screen.

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#### 3.4.1 Trend Graph

Trend Graph displays blood glucose test results for a selected time ranges. This report allows you to easily track changes in blood glucose data on a daily basis.



Blood glucose data are shown as dots on an X-Y graph. Each data is connected to the next with a solid line.

Glucose data will appear in chronological order, from oldest to (the) most recent. The X-axis represents the date and time of the measurement, and the Y-axis represents the actual glucose level.

Displayed Item		Description
Α.	Target Value	Target Value range is shown in light green region from
	Range	the graph.
Β.	Detailed	Move your cursor on each dots to show the
	Information	corresponding details including Date, Time, Glucose
		Data, Time Ranges, and etc.





#### 3.4.2 Average Analysis

The Average Analysis shows glucose averages by meal slots and day of the week. This analysis allows you to monitor how glucose data are influenced by meals and by day.



Average Analysis report is showing in two bar graphs.

Displayed Item	Description
A. Pre/Post Meal Average Values	It will show the average values by hours. The X-axis represents the meal and sleep time, while the Y-axis represents the average values. Average values in each Pre/Post Meal and Before/After Sleep are shown in the bar graph.
B. Daily Average Values	It will show the Daily Average Values. The X-axis represents the day while the Y-axis represents the Average Values.
C. Detailed Information	Move your cursor on the tip of each bar graphs to show the corresponding details including Average Values, Time Ranges, and etc.





#### 3.4.3 Daily Trend Graph

The Daily Trend Graph will show the glucose values in 24 hours period. This report allows you to easily track changes in blood glucose data on an hourly basis.



All the glucose measurement values are shown as dots in the X-Y graph. The X-axis shows the measurement time and the Y-axis shows the actual glucose measurement value.

Displayed Item		Description
Α.	Target Value	Target Value range is shown in light green region from the graph.
В.	Detailed Information	Move your cursor on each dots to show the corresponding details including Time, Glucose Values, Time Ranges and etc.
C.	Select Date	When you select a date, the dots will connect by lines and the colors of the dots and lines will change. Click the desired date to choose a specific date.



#### 3.4.4 Period Comparison Graph



The Period Comparison Graph allows you to compare glucose value trends between a selected date period and a previous date period.

Current blood glucose data are shown as dots on the upper part of an X-Y graph while previous date period is shown in the bottom, each piece of data is connected to the next with a solid line.

Glucose data will appear in chronological order, from oldest to most recent. The X-axis represents the date of the data and the Y-axis represents the glucose level.

	Displayed Item	Description					
Α.	Target Value	Target Value range is shown in light green region from the graph.					
Β.	Detailed Information	Move your cursor on each dots to show the corresponding details including Dates, Time, Glucose Values, Time Ranges and etc.					
C.	Statistics	It will show the Highest, Lowest, Median, Standard Deviation, Frequency of Measurements and Average Values.					





#### 3.4.5 Target Analysis

Target Analysis Report displays the percentage of glucose data above and below each pre-and post-meal target range.



Target Analysis Report displays total of 10 different pie charts. It uses applicable pre- and post-meal and night/bedtime target ranges to display an overall target range. Pie chart will show the percentage breakdowns using glucose data as well as the frequencies of measurements for all meals and sleep time.





3.4.6 Logbook

#### 3.4.6.1 View Glucose Record

View Glucose Record Report shows daily glucose data by the time ranges. Glucose values displays in a sequential list distinguished by meal/sleep time ranges.

<b>SMAF</b> Diabetes Mana	<b>RT LO</b> gement Softw	<b>G</b> are	John Doe	Male   1	1970/01/02			• O	• •	8
Home	<b>Niev</b>	v Repor	t							
User	Logbook View Gi	lucose Record	Glucose	se Statistics	2012/ cose CS	02/19 ▼ Value 🗹 Ma	~ 2012/0	02/25 V	C C C	
View Report	Date	Before Breakfast	After Breakfast	Before Lunch	After Lunch	Before Dinner	After Dinner	Before Sleep	Dawn	
	2012/02/25 2012/02/25	117 D.	99	148 108	90	106		108	128	
ta Management	2012/02/24 2012/02/24	236	Enter Date Enter Glucose	2012/02/24 236 mg/dL	4 07:46:33		94		104	
	2012/02/23 2012/02/23	108 113	Meal Exercise				22		104	
Print	2012/02/22	70	Insulin Memo				99		461	
Send Email	2012/02/21	90	140	108	63	113	117		212	V
			Bens	© 2013 All r	ights reserved.				÷.	?

Displayed Item	Description
A. Target Value	Control Solution values are shown in gray, Hyper readings in red, Hypo readings in blue, and non-working days in orange. Manual Entry values will show the Manual Entry icon on the right, and Manually entered memo will show the Memo icon on the left.
B. Detailed Information	Move your cursor on each values to show the correspoding details including Dates, Time, Glucose Values, Meal/Exercise information, Insulin dose, Memos and etc. Click on each values to edit or delete information in exception to Date, Time, and Glucose Values downloaded from the meter.
C. Manual Entry	You can instantly use the Manual Entry.



#### 3.4.6.2 Glucose Level Statistics

<b>SMA</b> Diabetes Mar	RTLOG	John	Doe   Ma	le   197	0/01/02		•	Q,	00
Home	<b>II.</b> View Re	port							
	Logbook		Custom		2012/02/19	~	2012/02/2	25 🔻	Apply
User	View Glucose F	Record	Glucose S	tatistics					í
_								Glucose Un	it : mg/dL
<u>u.</u>	Slot	Before Breakfast	After Breakfast	Before Lunch	After Lunch	Before Dinner	After Dinner	Before Sleep	Dawn
View Report	# of Data	8	7	14	7	7	8	1	7
	Average	123	133	114	108	115	113	108	182
ata Management	Maximum Value	236	182	148	198	139	205	108	461
	Minimum Value	70	99	61	63	85	22	108	104
	Hyperglycemia count	0	0	0	0	0	0	0	1
Print	Hypoglycemia count	0	0	1	1	0	1	0	0
	Standard Deviation	47.23	25.37	22.83	41.52	17.15	49.55	0	118.81
Send Email	Median Value	111	128	112	92	113	108	108	128
			Bens ©:	2013 All rights	reserved.				<b>†</b>

Glucose Level Statistics will display statistical datas including Number of Readings, Average, Highest, Lowest, Number of Hyper/Hypo Readings, Standard Deviation, Median in each meal/sleep time ranges. Manual Entry menu can be used here also.



#### Caution

Some reports show the percentage of glucose values in the Target Glucose Values. In some cases, the sum of the percentage might not be 100% because of rounding error or because the precision of SmartLog might not have been reflected.





3.5 Manual Entry

Manual Entry allows to record glucose values manually.

Click the Manual Entry menu and the following screen will appear.

		Manua	I Entry	⊗
А	Enter Date	2013/09/01	)	
	Enter Time	16 🖨: 02 🍣		
	Enter Glucose	120	mg/dL	
В	Exercise	<b>○○</b> ● <u></u>	• 😆	
	Meal	• • • •	• 😣	
С	Insulin	Humalog	Amount 8	
		Lantus	Amount 9	lu o
		Lantus	Add	
D		Please enter less that	an 200 characters.	
	Memo			
				0/200Characters
		Save	Cancel	

Displayed Item	Description
A. Glucose Data	It allows to edit or manually enter the measured date,
	time and glucose values.
B. Exercise/Diet	It allows to select Exercise and Diet information. You can
Information	select <u>1</u> among 3 icons showing Enough /Average
	/Low 🗵
C. Insulin	It allows to select the type of Insulin and enter the
	dosage. User - You can only select the Insulin which was
	added from the Health Management menu. (Refer to
	3.2.2 Health Management to add/remove a type of
	Insulin)
D. Memo	It allows to edit or enter data in less than 200 words.





3.6 Data Management

It allows to Import/Export the data base from SmartLog in various file format. It also allows to backup/restore data base.

Click the Data Management and the following screen will appear.

Data Management				
Export Data	Import Data			
Backup Data	Restore Data			





#### 3.6.1 Export Data

Click the "Export Data" and the following screen will appear.

			Exp	oort Da	ta		8
А	Save Location	C:\Users\jhko\D	esktop			Select Route	
В	File Format	🔵 CSV 🌒 PDF	<b>J</b> PG	o XLS			
С			Nar	ne		Date of Birth	Gender
		John Doe				1970/01/01	Male
		Hong				1978/01/15	Male
	User						
D	Period	2012/02/19	<b>—</b> ~ (	2012/02/25			
		1day 3days	7days 1	4days 30d	ays 60days	90days	
			Export	t Ca	ancel		

	Displayed Item	Description
Α.	Save Location	Click the 'Choose Location' button select the location to
		save data.
В.	File Format	Select which type of file format is to be used when
		export data.
С.	User	It will display registered Name of User, Date of Birth,
		Gender by selecting the desired user to export data. You
		can only send data records of one user at one at a time.
D.	Time Ranges	You can set the Time Ranges of the data.
		You can select from 1, 3, 7, 14, 30, 60 and 90 days, and
		click on the Calendar icon next to the dates to show the
		Calendar popup box to select the desired date.

Finish each settings and click the "Export" button to start exporting the data.



#### Note

Date format as displayed in the xls and csv file created by Export Data will be shown in mm-dd-yyyy format regardless of the setting.





#### 3.6.2 Import Data

Click the 'Import Data' and the following screen will appear.

		lı	mport Data		8
A	Save Location	C:\Users\jhko\Desktop	o\John Doe_20130903_111	Select Route	
В	lleer		Name	Date of Birth	Gender
	Usei	John Doe		Jan/01/1970	Male
С	Select User	Hong			
D	Period	2012/02/19	~ 2012/02/25		
		lmp	oort Cancel		

	Displayed Item	Description			
Α.	A. Save Location Click the 'Choose Location' button to find the saved c				
		You can only choose xls and csv files.			
B. User You can select the desired file to display the User r					
		Date of Birth, and Gender.			
С.	Select User	You can select the desired User data.			
D.	Time Ranges	It will automatically select the data day ranges.			

Finish each settings and click the "Import" button to start importing the data.





#### 3.6.3 Backup Data

Click the 'Backup Data' and the following screen appear.

		Bac	kup Data			8
A Save Location	C:\Users\jhko\E	Desktop			Select Route	
BSelect Period	2012/02/19	1 ~	2012/02/25			
	1day 3days	7days	4days 30days	60days	90days	
С		N	lame		Date of Birth	Gender
	John Do	ре			1970/01/01	Male
	Hong				1978/01/15	Male
Select User						
		_				
		Save	Cance	əl		

	Displayed Item	Description
Α.	Save Location	Click the 'Choose Location' button to choose the location
		to backup the data.
Β.	Time Ranges	You can set the Time Ranges of the data backup.
		You can select from 1, 3, 7, 14, 30, 60 and 90 days, and
		click on the Calendar icon next to the dates to show the
		Calendar popup box to select the desired date.
C.	User	It will display the User Name, Date of Birth, Gender and
		you can check the box next to the User Name. You can
		backup the Data information for more than one user at
		once.

Check each settings and click the "Save" button to backup the data. File format of backup data is sqlite.





#### 3.6.4 Restore Data

Click the 'Restore Data' and screen will show as below.

			Resto	ore Data		8
А	Save Location	C:\Users\jhko\Desktop\Hong_20130903_111401 Select Route			•	
В	Select Period	2012/02/19	~ (2	2012/02/25		
	Select User		Name		Date of Birth	Gender
		Hong			1978/01/15	Male
			Save	Cancel		

Displayed Item	Description
A. Save Location	Click the 'Choose Location' button to choose the location
	where the data file is saved.
B. Time Ranges	It will automatically select the data date range.
C. User	When you select a file to backup data, User Name, Date
	of Birth and Gender will be displayed.

Check each settings and click the "Save" button to restore the data.





3.7 Print Report

You can print all types of the reports.

Click the 'Print Report' and the screen will show as below.

Print	⊗
A Printing Period	
2012/02/19 📺 ~ 2012/02/25 🛗	
1day 3days 7days 14days 30days 60days 90days	
N	
B Select Report Type	
Select Al/De-select	
🗹 Trend Graph 🛛 🗹 Average Analysis	
🗹 Dally Trend 🛛 🗹 Target Analysis	
🚽 Period Comparison 🛛 🧹 Logbook	
Print Cancel	

Displayed Item		Description
Α.	Time Ranges	You can set the day Ranges from 1, 3, 7, 14, 30, 60 to 90 days, and click on the Calendar icon next to the dates to customize the Time Ranges.
В.	Type of Reports	Type of Reports are already set under Favorites on the 'User - User Profile' menu. You can check/uncheck the checkbox next to each type of reports to change the type of the reports to display.



Check each settings and click the "Print" button and the Preview screen will appear as shown below.

		Preview		Print	Cancel
<b>SMA</b> Diabetes M	<b>RTLOG</b>				
Trend ( 2012/02/1	Graph 9 ~ 2012/02/25	Name : Date of Birt Gender :	John Doe h:1970/01/01 Male		
460	1 ľ	). I ]	ľ		
420					
340					
1p/6u) 220	1		1	28	
9 180 9 140 -			/		

Click the 'Print' button to print.

Type of Reports, User Name, Date of Birth, and Gender are printed on the top of the printed Report while User Name, Page Number and Printed Date is printed on the bottom of the Report page. Every Reports will include the 'Glucose Level Statistics' on the bottom of the page.

3.8 Send Email

You can send all the reports via email.

You can use this function if you have the email client program installed and have the internet connection.

When you start the 'Send Email', email client program installed in OS will run. Please refer to your email client program user's manual to learn how to send emails.





3.9 Setting

From the Setting menu, you can change the Date Format, Unit for Glucose, Target Value as well as the Time of the meter.

Click the 'Setting' and the screen will show as below.

	Settings 🛞				)				
A	Date Format	oyyyy/mm/dd	<b>d</b> d/m	nm/yyyyy	● mm/d	diyyyyy		Setting	
В	Glucose Unit	omg/dL (	o mm	oИL				County	
С	Glucose Target	Pre-meal	80	)~(	120	Post-meal	80	~ 160	
	Giucose Unit : mg/aL	Hypoglycemia	70	below		Hypergiycemia	240	above	
		Total Range	80	)-(	160			Setting	
D	Set time	Automatically s	et date/t	ime from I	PC				
		2013	/09	/03	15	:34:23			
		Set by manual	ly enterin	ng date/tin	ne.				
		2013/09/03			00 🌔:	00 🌔		Setting	

Displayed Item	Description
A. Date Setting	Select the Date Format to be displayed. Dates will be displayed with only numbers. However, when using dd/mm/yyyy or mm/dd/yyyy, month will show in English. (ex: 01 - Jan) Click the first "Set' button to apply the selected Date Format. When the setting is completed, the screen will show as below. Setting The setting has been completed.
B. Glucose Unit	You can select the Glucose Unit. Click the first "Set' button to apply the prefered Date Format. When the setting is completed, the screen will show as below. Setting The setting has been completed.

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C. Target Value	You can set the Target value range in each pre/post- meal. Each maximum target values should be equal or higher than the minimum target values. Target values between pre-meal and post-meal may overlap. Set Target Values will be shown in the region in a lighter green color. Click the second "Set" button to apply the set target value. When the setting is completed, the screen will appear as below. Setting Mas been completed.
	ОК
D. Time Setting	You can set Date and Time of your meter. You can set it to the Date/Time of your PC and MAC or you can customize your Date/Time. Click the third "OK" button to set the Date/Time of the meter. (Time Setting function only applies to the meters that support Time Setting function.) Click the 'Set' button and screen will appear as below. Setting Click OK button after connecting the device for synchronization.
	Click the "OK" button to continue Time Setting. When the setting is completed, the screen will show as below. Setting Reference of the screen will show as below.
	If the meter is not connected, failed in Time Setting, or meter that does not support Time Setting function is connected, then the screen will show as below. Setting The device is not connected. Please retry after connecting the device.





Caution

#### Important Information about Glucose Unit

- Standard Glucose Unit differs by countries and regions. For example, mg/dL is used in U.S.A while mmol/L is used in UK. mmol/L unit displays below decimal point while mg/dL unit does not.
- •
- Glucose Unit differs measurement information significantly by mg/dL or mmol/L.





#### Note

Major health organizations recommend the following target ranges in their clinical practice guidelines.

[A] American Diabetes Association "Standards of Medical Care in Diabetes – 2012." Diabetes Care. January 2012; 35(1):S11-S63.

□ In mg/dL

Pre-meal targets\* 70-99mg/dL Post-meal targets\* 100-139 mg/dL

In mmol/L	
Pre-meal targets*	3.9-5.5 mmol/L
Post-meal targets*	5.6-7.7 mmol/L

 [B] American Association of Clinical Endocrinologists Guidelines for Intensive Diabetes Self-management
 In mg/dL
 Pre-meal targets\*
 90-110 mg/dL
 Post-meal targets\*
 90-140 mg/dL

□ In mmol/L Pre-meal targets\* 5.0-6.1 mmol/L Post-meal targets\* 5.0-7.8 mmol/L

[C] Canadian Diabetes Association Pre-meal targets\* 4.0-7.0 mmol/L

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Post-meal targets\* 5.0-11.8mmol/L

\* These values are applicable to pre- post-meal targets for user-specific and diabetes-type specific targets for Types 1 and 2.



• Always consult with your healthcare provider to set the Glucose Level Target.

#### 3.10 Help

Click the 'Help' menu and the following screen below will appear as below.



Displayed Item		Description
A. User'	s Manual	Click the icon to see the User's Manual in pdf file format.
B. Dowr	nload	If Adobe Reader is not installed yet, click the icon to
Adob	e Reader	connect to Adobe Reader website for download.





#### 4. Appendices

4.1 Appendix A Glossary

This appendix describes terms used in SmartLog User's Manual.

#### Oral Meds

Medication that is swallowed as a pill or liquid.

#### Hyperglycemic values

An abnormally high level of glucose in the blood.

#### Meal slot

A slot that allows you to manage the day into eight separate time ranges.

#### **Dietary treatment**

Supplementary medical treatment to control diet in order to cure diseases.

#### Exercise treatment

Supplementary medical treatment to cure diseases through physical exercise.

#### Insulin

A hormone secreted by the pancreas that stimulates the uptake of glucose by body cells

#### Median

Average of maximum and minimum glucose values.

#### Glucose average

The arithmetic mean calculated on a set of glucose data.

#### **Standard Deviation**

A measure of the spread of a set of glucose values from the mean value in the Period Comparison Graph.

#### Field

An area of a computer's memory or a program where data (number, name, and texts) can be entered, edited, or stored.

#### Blood glucose level

Measurement of glucose levels in the bloodstream



#### 4.2 Troubleshooting

The appendix will help you solve problems that you may have when using SmartLog. If it is still not solved, please contact the Customer Service.

Problem	Solution
SmartLog does not start.	<ol> <li>SmartLog Diabetes Management Software may already be running. If this is the case, click the SmartLog Diabetes Management Software icon.</li> </ol>
	2. Close all running programs and re-open them.
	3. Restart your computer and then run the program.
	4. If the above do not work, uninstall and reinstall the program. (When the program is uninstalled, all saved data will be lost. Before doing this, please contact Customer Service.)
SmartLog is unable to communicate with	1. Close SmartLog and and re-open it.
meter.	2. Check whether the cable is properly connected
	<ol> <li>Another program other than SmartLog may be using the communication port. Close all programs and run SmartLog.</li> </ol>
	4. Check the battery of the meter. If the battery symbol blinks on the meter, change the battery.
Vou cappot print from Smartl og	5. Report your PC and ity again.
	<ol> <li>If using a network printer, make sure it is ONLINE.</li> </ol>
	3. Make sure the printer cable is properly connected.
Manually input data is not displayed.	<ol> <li>Make sure the selected date and the date of the input data match. If not, change the date.</li> </ol>





4.3 Technical Support

If you have any difficulty using SmartLog, please refer to SmartLog User's Manual. For further technical support, please contact i-SENS customer service or visit our website www.i-sens.com.

#### ■ i-SENS Headquarter

Country	Korea
Department	Customer Service
Phone	080-910-0600
Fax	080-910-0688
Hours	Mon ~ Fri, 9AM ~ 6PM
Email	caresens@i-sens.com
Product Website	www.caresens.co.kr

#### Others

If you need help, please contact i-SENS representatives and visit www.isens.com for more detailed information.



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