A812DA30 08/2015



#7102~7107, #7402, #7403, #7406, 140, Beolmal-ro, Dongan-gu, Anyang-si, Gyeonggi-do 431-804 REPUBLIC OF KOREA www.allmedicus.com



EU Representative MT Promedt Consulting GmbH Altenhofstr. 80, D-66386 St. Ingbert, Germany Tel.: +49 6894 - 58 10 20



Gluco Br. auto Blood Glucose Monitoring System

User Manual

AGM-4000



*TEST SUMMARY

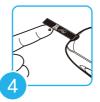
This summary is intended only as a quick reference and is not a substitute for GlucoDr auto Blood Glucose Monitoring System User Manual. Please read the entire this User Manual before you begin testing.



Apply the blood drop to the side edge of the yellow window of the test strip.



Check the User ID.



Wait for the blood drop to completely fill the yellow window of the test strip, then the meter will begin the countdown.



Insert a test strip.
The meter will
automatically turn on.
Check the code number.
The code number
displayed on the meter
must match the one on
the test strip vial.



The blood glucose result will be displayed on the meter in just 5 seconds.

"Thank you for using **GlucoB**r. *auto*™ Blood Glucose Monitoring System"

This User Manual will tell you all you need to know about the system and how it works.

Please read this carefully before using the meter.



*PRECAUTIONS



Intended Use

For Self-testing: GlucoDr auto Blood Glucose Monitoring System is for quantitative blood glucose testing in fresh capillary whole blood drawn from the fingertips, palm, arm, thigh, and calf. The GlucoDr auto Blood Glucose Monitoring System is for testing outside the body (in vitro diagnostic use). The GlucoDr auto Blood Glucose Monitoring System is intended for use by diabetic lay users for self testing to improve management of their blood glucose level. The GlucoDr auto Blood Glucose Monitoring System should not be used for the diagnosis of or screening of diabetes mellitus, or for neonatal use.

For professional use: GlucoDr auto Blood Glucose Monitoring System is for quantitative blood glucose testing in venous, arterial whole blood and fresh capillary whole blood drawn from the fingertips, palm, arm, thigh, and calf. The GlucoDr auto Blood Glucose Monitoring System is for testing outside the body (in vitro diagnostic use). The GlucoDr auto Blood Glucose Monitoring System is intended for use by healthcare professionals to improve management of patient's blood glucose level. The GlucoDr auto Blood Glucose Monitoring System should not be used for the diagnosis of or screening of diabetes mellitus, or for neonatal use.



Test Principle

The blood sample is drawn into the test strip's reaction chamber through capillary action. Glucose in the sample reacts with glucose dehydrogenase and mediator in the test strip. This reaction creates electrical currents. The electrical currents produced are proportional to the glucose concentration in the blood and converted to the equivalent glucose concentration values calculated based on the algorithm programmed in GlucoDr auto Meter.



-- Precautions for Use

- The GlucoDr auto Meter is designed for use with GlucoDr auto Test Strips (manufactured by All Medicus Co., Ltd.) only.
- The GlucoDr autó Blood Glucose Monitoring System is calibrated to produce values equivalent to results on plasma specimens obtained from a laboratory analyzer (YSI 2300 STAT Plus).
- The GlucoDr auto Blood Glucose Monitoring System should not be used for the diagnosis of diabetes.

- Rapid change in temperature may cause inaccurate test results in reading. When taking the meter from cold to warm area or from warm to cold area, let the meter sit for about 30 minutes to adjust to the room temperature.
- Do not drop the meter.
- Do not disassemble, repair or remodel without consultation. The sensitive parts could be damaged and the warranty will then become invalid.
- A hematocrit that is either very high (above 60%) or very low (below 20%) can cause false test results.



- Store test strip vials in dry place with temperature ranging between 1~32°C (34~90°F).
- Avoid direct sunlight, heat and excessive humidity.
- Always close the vial cap immediately after removing a test strip from the vial. If the test strip vial is left open for a long time, the test strips will become unusable.
- Use the test strip immediately after removing it from the vial.
- Use all the test strips within 4 months after the first opening.
- Store your test strips only in their original vial and do not transfer them to a new bottle or any other container.
- Do not handle the test strip with wet hands.
- Do not use the test strip after the expiration date printed on the vial.
- Do not bend, cut, or alter the test strips.
- Do not insert the same test strip into the test port multiple times. It can lead to an improper operation.

Safekeeping

- Store the GlucoDr auto Meter at a temperature between 0~40°C (32~104°F).
- Store the GlucoDr auto Meter at a place where relative humidity is less than 85%.
- Keep the GlucoDr auto Meter in sanitary environment.
- Keep the meter away from direct sunlight.
- Keep the test port away from dirt, blood or water.
- Do not store your meter and test strips in the car, the bathroom, or the refrigerator.
- (sensitive to temperature and humidity)
- Keep the meter, test strip vials and lancing materials away from children.
- Clean the outside of the meter using a moist (not wet) cloth or tissue with isopropyl alcohol or mild detergent with water. Do not immerse the meter in water or other liquid.

Table of Contents

• Getting Started	GlucoDr auto™ Blood Glucose Monitoring System 01 GlucoDr auto™ Meter 02 GlucoDr auto™ Meter LCD Display 04 GlucoDr auto™ Test Strip 05
Before Testing	Setting the User ID 06 Checking the Code Number 08 Checking Your System with GlucoDr auto™ Control Solution 09 Preparing the Lancing Device 14
Performing the Blood Glucose Test with GlucoDr auto™ I 17	
Using the Meter Memory Function	Entering the EVENT RECORD MODE 22 Understanding Your Test Results 24 Recalling the Previous Test Results 25
• Setting the Meter	l 29
• Caring for GlucoDr auto™ Meter	Installing Battery 34
Additional Information	Display Message Guide 36 Troubleshooting Guide 41 Specifications 42 Performance Characteristics 43 Explanation of Symbols 44



1 LCD Display

- Test results, icons, symbols and simple messages appear here.

2 +/- Button

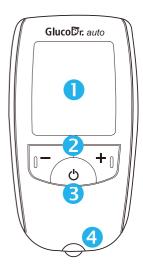
- Change the User ID number in the USER ID MODE.
- Recall the stored test result in the MEMORY MODE.
- Select an event in the EVENT RECORD MODE.
- Change the date and time in the SET MODE.

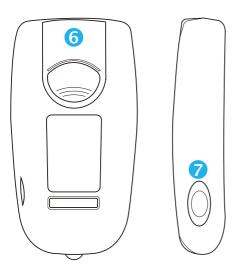
Power Button

- Turn the meter on/off.
- Enter into different MODEs while pressing the power button. (1 second : USER ID MODE, 3 seconds : SET MODE)
- Delete all the stored test results in the MEMORY MODE.

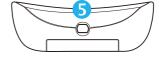
4 Test Port

- Insert the GlucoDr auto Test Strip for testing. Then the meter turns on and displays the code number automatically.





- Data Port
 - Transfer your test results from the meter to a computer.
- **6** Battery Cover
- **7** Test Strip Ejector Button



- Battery life.
- SET MODE.
- AVERAGE MODE.
- MEMORY MODE.
- CODE MODE
- MEMORY and CODE NUMBER.

The meter displays the current memory order number in the MEMORY MODE. The meter displays the current code number in the CODE MODE.

STRIP ICON.

When the STRIP ICON blinks, insert a test strip to the meter.

BLOOD DROP ICON.

When the BLOOD DROP ICON blinks, apply blood sample.

TEMPERATURE ICON.

When the meter is not used at a recommended temperature range, "Er1" and TEMPERATURE ICON appear.

- CURRENT TIME and TEST TIME in the MEMORY MODE.
- (i) CURRENT DATE and TEST DATE in the MEMORY MODE.
- UNIT OF MESUREMENT.
- R EVENT ICON.

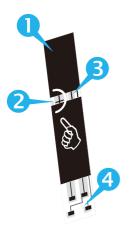
If you choose an event icon which correlates to test results, it helps to manage glucose level more effectively.

ALARM.

You can set up to four different alarms. Each alarm rings for 10 seconds.

(5) User ID set on the meter.





- 1 Grip
 - Hold this part to insert or remove test strip.
- Yellow Side-edge
 - Apply blood sample here; blood is absorbed automatically.
- **3** Confirmation window (Reaction chamber)
 - Make sure the confirmation window fills completely.
- 4 Gold electrodes
 - Insert into test port.

The GlucoDr auto Meter can manage 5 users' test results separately. Select the correct User ID before testing if the meter is used for more than one user. Make sure to confirm the User ID to insure that the test results are stored to the User ID. If a single user wishes to use GlucoDr auto Meter only for him/herself, there is no need to set up the User ID.



Turn on the Meter

Press the power button to turn on the meter. The STRIP ICON will blink.



Check the User ID number.

Check the User ID number on your meter.
If the User ID number is correct, start the test.



Enter the USER ID NUMBER MODE.

When the STRIP ICON flashes, press and hold the power button for one second. The meter will enter the USER ID NUMBER MODE. When the User ID number flashes, release the power button.



Select the User ID number.

Press +/- button to select User ID number. If "+" button is pressed, the User ID number will go up, and if "-" button is pressed, the User ID number will go down.



Save the User ID.

Once User ID is selected, press the power button once.

Code numbers are used to calibrate your meter with the test strips for accurate test results. Whenever you test, you must check if the code number displayed on the meter matches the one on the test strip vial.





Insert a GlucoDr auto Test Strip

Insert a GlucoDr auto Test Strip into the test port and the GlucoDr auto Meter will turn on automatically. Then the code number, STRIP ICON and BLOOD DROP ICON will appear.





Check the Code Number

Make sure that the code number displayed on the meter matches the one on the test strip vial. If the code numbers match, you can begin the test.



- If the code number on the meter doesn't match the one on the test strip vial, insert a new test strip and check the code number again.
- If they do not match again, please contact your local distributor.

Control solution test is to check the performance of your meter and test strips. GlucoDr auto Control Solution contains a measured amount of glucose that reacts with the GlucoDr auto Test Strips.

The control solution test confirms that your meter and test strips are working correctly. Compare your control solution test results with the range printed on the test strip vial label. It is very important that you do this simple test routinely to make sure you get accurate test results.



Check your system with the GlucoDr auto Control Solution under the following situations.

- When you want to check the performance of the meter and test strip.
- When you leave your test strip vial cap open for a long time.
- When you open a new vial of test strips.
- When you think that the test results are not accurate.
- When you drop the meter.
- When you suspect your meter or test strips are not working properly.
- When your blood glucose test results are not consistent.



- Use only the GlucoDr auto Control Solution for the test.
- Check the expiration date printed on the control solution vial. Do not use if the expiration date is past. Discard the control solution on the expiration date printed on the vial or three months after first opening whichever comes first. When you first open a new vial of the control solution, count three months forward and write the expected discarding date on the label of the control solution vial for your convenience.
- The control solution, meter, and test strips should be kept at a room temperature prior to the use.



- Do not drink the control solution.
- Tightly close the cap of control solution vial and store at a room temperature after the test.







Insert a Test Strip

Insert a test strip, with the printed side facing up, into the test port of the meter. Gently push it all the way in until it goes no further.

The meter will turn on automatically and beep. Then the code number and the BLOOD DROP ICON will appear. Make sure that the code number displayed on the meter matches the one on the test strip vial. If the code numbers match, you can start the test. If the code number on the meter doesn't match the one on the test strip vial, insert a new test strip and check the code number again.



Do not force the test strip into your meter. This may cause malfunction.



2 Apply Control Solution

Shake the control solution vial well. Prepare a drop of the control solution on a clean plate. Slowly let the side edge of the yellow window of the test strip touch the drop of the control solution following the finger symbol. Once the confirmation window fills completely, your meter will begin the countdown.



To ensure accurate test results

- Gently shake the control solution (vial) to ensure the control solution is mixed well before each test.
- Squeeze the vial to discard the first drop before the test.



Test Result Appears in 5 seconds

Your meter will display countdown from "5" to "1", then the test result will appear.



3

Do not remove the test strip from your meter before you select the CONTROL SOLUTION ICON in the EVENT RECORD MODE. If you remove the test strip before making the selection, you cannot save the test result marked as the control solution test. See page 22-23 for more details.



The Control Solution range printed on the test strip vial is for the GlucoDr auto Control Solution only. It is used to check the performance of your meter and test strips. It is NOT a recommended range for your blood glucose level.





Compare Control Solution Test Results

Compare the control solution test result to the control solution range printed on the test strip vial. The test result should fall within this range. Each vial of test strips may have a different control solution range. If the test result you get is not within this range, the meter and test strips may not be working properly. Repeat the control solution test. Refer to the GlucoDr auto Test Strip Instruction for the use.



Out-of-range test results may be caused by one or more of the followings:

- Expired or contaminated control solution,
- Expired or damaged test strip,
- Use of control solution or test strip past its discarding date,
- Error in performing the test,
- Failure to shake the control solution vial well,
- Code number printed on the test strip vial does not match the one displayed on the meter.
- Meter, test strips or control solution are kept too warm or too cold,
- or Meter malfunction



If your control solution test results continue to fall outside the range printed on the test strip vial, the GlucoDr auto Blood Glucose Monitoring System may not be working properly.

- If this is the case, do not use the system to test your blood glucose levels.
- Contact your local distributor.





Record the Control Solution Test Results in the Meter

To record the control solution test results, press any of +/- button of the meter to select CONTROL SOLUTION ICON. Press and release the power button if selection is completed. The control solution test results will be saved.



INFORMATION



Record all the control solution test results with CONTROL SOLUTION ICON' in 'to distinguish them from those of actual blood glucose tests in the meter memory. Recorded control solution test results will not be calculated in your result averages.





2

3

Turn the cap of the lancing device counter-clockwise to remove the cap.



Insert a Lancet into the Lancet Holder.

Insert the lancet firmly into the holder until it comes to a full stop. When the lancet is placed in the lancing device, twist off the protective disk of the lancet. Do not discard the protective disk of the lancet; it will be used to dispose the lancet safely after its use.



Replace the cap

Turn the cap of lancing device clockwise until it fits.



- Before using the lancing device, wash your hands in warm water with soap.
 Make sure to rinse and dry them thoroughly. Perspiration, dirt or water remaining on your hands may cause incorrect test results.
- Avoid using hand lotion or any other oily products before using the lancing device.





The dial for setting the puncture depth is at the tip of the lancing device. Higher number indicates deeper puncture. Thus, dial to the lower number for thin skin.



Charge the Lancing Device.

Draw back the end part of lancing device until it clicks, and then release it.



6 Lance your Finger

Place the lancing device carefully on the tip of your finger and press the release button.



Remove the Used Lancet

Place the protective disk on a flat surface. With the used lancet still in the lancing device, push the lancet needle completely into the protective disk. Push the lancet ejector forward with your thumb and simultaneously pull out the sliding barrel to dispose the used lancet in a proper bio-hazardous container.



- To reduce the risk of infection, never share a lancet with another person.
- Lancets are for single use only. Always use a new sterile lancet.
- Used strips, lancets and meter may be considered bio-hazardous waste in your area. Make sure to follow your healthcare professional's recommendations or local regulations for proper disposal.
 - Lancing Device Manufactured by CE
 GMMC
 - 1112, 130, Digital-ro, Geumcheon-gu, Seoul, Korea

Lancet Manufactured by CE₁₃₇₀
SAEHANMED CORP.

Na-dong, Ga-dong, 331 Seongseok-ro, Ilsandong-gu, Goyang-si, Gyeonggi-do, Korea

RECOMMENDED AVALIABLE LANCETS

Some general sterilized lancets are BD-Ultra Fine, E-Z Ject, G-P Lite, Microlet, Monolet, Soft Touch, Ultra TLC, Unilet GP and Greenlan.

Note: Not recommended lancets in the above list may not work properly with the lancing device due to their dimensions. Please contact your supplier to make sure you are using proper lancets.

USING THE CLEAR CAP FOR ALTERNATIVE SITE TESTING(AST) OPTION

Replace the cap of lancing device with the clear cap.









Watch through the clear cap until a sufficient blood sample is taken. If there is not enough blood, gently massage the area until a sufficient sample has been collected.



- flucoDr auto™ Meter
- ② GlucoDr auto™ Test Strip
- S Lancing Device
- 4 Lancets



Insert a Test Strip

Insert a test strip, with the printed side facing up, into the test port of the meter. Push it all the way in until it goes no further. The meter will turn on automatically and beep. Then the code number and the BLOOD DROP ICON will appear. Make sure the code number displayed on your meter and the test strip code number match.



CAUTION

Do not force the test strip into the meter. This may cause malfunction of the meter.



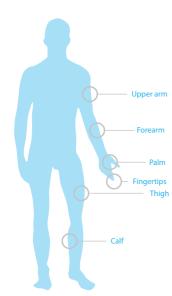
Obtain a Blood Drop

Obtain a blood drop from your fingertip using the lancing device (see page 14-16) The blood sample must be at least 0.5 micro liters in volume [actual size \bullet].



Before puncturing, gently massage the fingertip to obtain a round drop of blood.

Do not smear the blood sample.



About Alternate Site Testing(AST)

• IMPORTANT: There are limitations for doing AST. Please consult your healthcare professional before you do AST.

•What is AST?

Alternate site testing(AST) means you can use parts of the body other than your fingertips to check your blood glucose levels. GlucoDr auto Meter allows you to test on your palm, arm, thigh, and calf.

•What's the advantage?

Fingertips feel pain more readily because they are full of nerve endings (receptors). At other body sites, nerve endings are not so numerous, and you will therefore feel less pain.

•When to use AST?

Food, medication, illness, stress and exercise can affect your blood glucose levels. Capillary blood in the fingertip reflects these changes faster than capillary blood in the alternates sites.

Alternative site test results may be different from fingertip test results when glucose level is changing rapidly.

Use AST only when it has been more than two hours after any one of the followings: a meal, diabetes medication, or exercise.

IMPORTANT: For any of the following cases, do not rely on test results at the alternative sampling sites, but strictly use samples taken from the fingertips:

- You think your blood glucose level is low.
- You have hypoglycemic unawareness (lack of symptoms).
- The site test results do not agree with the way you feel.
- After a meal
- After insulin dose
- After diabetes medication
- After exercise
- During illness
- During times of stress



Apply the Blood Sample

Apply the round drop of blood to the side edge of the yellow window of the test strip and then blood drop will be absorbed into the narrow channel. Touch and hold the blood drop to the side edge of the yellow window of test strip until blood completely fills the confirmation window and the meter beeps. Then, your meter will start the countdown.





You should apply blood to the finger symbol on the test strip as directed.

- Do not put blood on the top of the test strip.
- Apply the blood drop to the side edge of the yellow window of the test strip.





- If insufficient blood is inserted, Error message will be displayed.
 See the picture in the left for proper application of the required blood volume to perform the test properly.
- Even if the meter begins the countdown despite the fact that the confirmation window is not completely filled, do not apply more blood to the test strip.

Discard the test strip and repeat the test with a new test strip.







Test Results Appear in 5 seconds

Once the meter completes the countdown from "5" to "1", your test result will appear on the meter display. If you remove the test strip immediately, only the test result (without recording the event) will be automatically saved in the meter memory. Recording the event with each test result may help with effective diabetes management. To enter the EVENT RECORD MODE, you may press +/- button of the meter before removing the test strip from the meter (See pages 22-23 for more details).



If you do not apply a blood drop within 5 minutes, your meter will turn off automatically. Once the meter turns off, remove the test strip and then insert it back into your meter to turn on the meter.



After the test, press any of +/- button in the EVENT RECORD MODE before removing the test strip from your meter. Recording the your condition will lead you to more effective diabetes management.

For effective diabetes management, stored test results with your condition will help you and your healthcare professional to track changes in your blood glucose level.



Press +/- Button after the Test

Press +/- button after the test. Once the test result appears on the meter display, press any of +/- button to enter the EVENT RECORD MODE.



Select the EVENT ICON

There are 3 different EVENT ICONs: Post Meal, Pre Meal, and Control Solution. Press +/- button to select an icon which correlates with the test result.



Remove the Test Strip

After the selection of an EVENT ICON, remove the used test strip. The used test strip will be discharged automatically by pushing the Ejector Button on the side of the meter. After discharging the used test strip, the test result with the EVENT ICON will be saved in the meter memory automatically.



Once you remove the test strip from the meter, you cannot go back to the EVENT RECORD MODE. Do not remove the test strip from the meter until selecting an EVENT ICON is completed.



POST MEAL ICON

Select this icon when you have a test after meal (food intake).



PRE MEAL ICON

Select this icon when you have a test before meal.



CONTROL SOLUTION ICON

Select this icon in performing control solution tests or improper blood glucose test. Record all control solution tests with CONTROL SOLUTION ICON to distinguish them from blood glucose tests in the meter memory. Recorded control solution test results will not be calculated in your result averages.

The GlucoDr auto Meter will display test result between 10 and 900 mg/dL (0.6~50 mmol/L). If your test result is lower than 10 mg/dL (0.6 mmol/L), "Lo" will appear on the meter display. If your test result is higher than 900 mg/dL (50 mmol/L), "HI" will appear on the meter display.







 If "HI" or "Lo" appears instead of a test result, retest your blood glucose level immediately with a new test strip. If the same message appears, check the system with the GlucoDr auto Control Solution. If your meter and test strip are working correctly, you must contact your healthcare professional immediately.

Expected Values¹

Criteria for the diagnosis of non-diabetes

Fasting plasma glucose (FPG) 70 \sim 100 mg/dL (3.9 \sim 5.6 mmol/L) Two hours after meals plasma glucose < 140 mg/dL (7.8 mmol/L)

Criteria for the diagnosis of diabetes

Fasting plasma glucose (FPG) >126 mg/dL (7.0 mmol/L) Two hours after meals plasma glucose >200 mg/dL (11.1 mmol/L)

Categories of increased risk for diabetes (prediabetes)

Fasting plasma glucose (FPG) $100 \sim 125 \text{ mg/dL}$ (5.6 $\sim 6.9 \text{ mmol/L}$) Two hours after meals plasma glucose $140 \sim 199 \text{ mg/dL}$ (7.8 $\sim 11.0 \text{ mmol/L}$)

Reference

1. American Diabetes Association: Clinical Practice Recommendations (2013) Diabetes Care, Vol 36, Supplement 1, p. S1-S100.

The GlucoDr auto Meter has a memory capacity to store up to 500 most recent test results with date, time and event. It also provides you averages of your blood glucose test results over a period of time (Options: 0d, 7d, 14d, 21d, 28d, 60d, or 90d average). You can review the test results stored in the memory by the following steps.





Press +/- Button

To enter the MEMORY MODE, press +/- button with the meter turned on.





If there is no test result, the meter will not display anything and +/- button will not operate.



2 Indicate

Indicate the Average Value

You can select the number of days for the average (0d, 7d, 14d, 21d, 28d, 60d, or 90d) in the SET MODE. "7d" shown in the left side indicates that the value 96 is a calculated average for the past 7 days.



When the whole test results' average is calculated, individual event records are not considered. The GlucoDr auto Blood Glucose Monitoring System will use 900 mg/dL (50 mmol/L) for "HI" results, and 10 mg/dL (0.6 mmol/L) for "LO" results.





You can delete all the stored test results in the meter memory after the average value is displayed. Press and hold the power button for 5 seconds until "CLr" flashes.



3

Recall your Test Results

Press and release +/- button once to make the most recent test result appear on the meter display. Every time you press and release +/- button, the meter will display the next result up to 500 test results.



Press and hold +/- button in the MEMORY MODE in order to view the test results faster.







Without any button action for 3 seconds in the MEMORY MODE, then code number will be displayed.





To delete individual test result in the MEMORY MODE, press and hold the power button for 5 seconds until "dEL" flashes 3 times.





Exit the MEMORY MODE

Press and release the power button once to exit from the MEMORY MODE.

The GlucoDr auto Meter comes with the time, date, alarm(0), average day(7d) and unit of measurement (mg/dL) preset. However, if you need to change the setting of the meter, or if you replace the battery, you need to enter the SET MODE and reset them. It is important to set the correct time and date. Having the correct time and date of each blood glucose test result will help you and your healthcare professional to track changes in your blood glucose level.



INFORMATION

After replacing the battery, you should update the time and date setting.





Press and Hold the Power Button for 3 seconds

With the meter turned on, press and hold the power button until "SET" appears on the meter. Release the power button to enter the SET MODE. The Year flashes.



To exit the SET MODE at any time, press and hold the power button for 3 seconds. The settings you have already made will be saved.



2 Se

Set the Year

Press and release +/- button to adjust the year until the correct year appears on the meter display. If you press and release the power button in SET MODE, the meter will advance to the Month Setting.



Press and release the power button in order to advance to the next setting steps in the SET MODE. Press and release +/- button to adjust the number in the SET MODE. To move faster, press and hold +/- button.



Set the month

The Month flashes. Press and release +/- button until you get the correct month. If you press and release the power button, the meter will advance to the Day Setting.



Set the Day

The Day flashes. Press and release +/- button until you get the correct day. If you press and release the power button, the meter will advance to the Date Format Setting.

?

Set the Date Format

The Date flashes. Press and release +/- button until you get the date format that you want. If you press and release the power button, the meter will advance to the Hour Setting.



Set the Hour

The Hour flashes. Press and release +/- button until you get the correct hour. If you press and release the power button, the meter will save hour and advance to the Minutes Setting.

Set the Minutes

The Minutes flash. Press and release +/- button until you get correct minute. If you press and release power button, the meter will advance to the Time Format Setting.

Set the Time Format

The "12H" or "24H" flashes. Press and release +/- button to adjust until you get the correct time format. If you press and release the power button, the meter will advance to the Unit of Measurement Setting.

Set the Unit of Measurement

The Unit of Measurement (mg/dL or mmol/L) flashes. Press and release +/-button until you get the unit measurement that you want. If you press and release power button, the meter will advance to the Average Period Setting.





The Average Period flashes. Press and release +/- button until you get the period of average setting that you want (0,7,14,21,28,60,or 90). If you press and release the power button, the meter will advance to the Beep Setting.



Set the Beep

When "ON" or "OFF" flashes, press +/- button, then you can set the beeper 'On' or 'Off'. If you set it 'On', press and release the power button. And then the meter will advance to the Alarm Setting.

If you set it 'Off', you don't need to set the alarm and just finish the SET MODE.



Set the Alarm (up to 4 different Alarms a day)

The Alarm times flash. Press and release +/- button until you get the alarm times (0 to 4th) setting that you want. If you press and release the power button, the meter will advance to the Alarm Time Setting.



Set the Alarm Time

The Hour of the Alarm Time flashes. Press and release +/-button to set the alarm time the same as the Time Setting (⑥-⑦).



Save the Setting Information

Press and release the power button, and then the meter will turn off. The setting information you entered will be saved.



Totally four different alarms can be set. You can continually set alarm right after the first setting. Press and release the power button after you complete the first alarm time setting. Then "2" appears, you can repeat to set the next alarm time.

A battery(CR2032) will provide you enough power to perform about 1,000 tests. The meter will alert you when the energy level is getting low by displaying the message (. In this case you can test a few more times but the battery should be replaced to new one as soon as possible. If "bAt" appears on the meter display, the meter will not operate. The battery must be immediately replaced.



Always turn off the meter before replacing the battery. Replacing the battery with the meter power on may lead to malfunction of the meter.





Turn off the Meter.

Press the power button to turn off the meter.



Remove the Battery Cover

Press down on the battery cover then slide it out. The battery cover will be released.



Replace the Battery

Remove the old battery and put the new one with "+" sign facing up.



Close the Battery Cover

Slide the battery cover back into place until it clicks into the meter.











What it means.

System check.
This display always appears when you press the power button to turn on the meter.

The meter is ready for you to insert a test strip.

The meter is ready for a blood drop or control solution. (This is an example of a code number stored in the meter.) The meter displays countdown from 5 to 1, while calculating a blood glucose test result.

Action

You should check that your meter matches the example exactly every time your meter turns on. Do not use the meter if the display check screen does not exactly match the example. Please contact your local distributor.

Insert a test strip into the test port of your meter. Make sure the code number displayed on the meter matches the one on the test strip vial.

Apply a blood sample to the test strip.(See pages 17-21 for how to test your blood glucose level) No action is required.











A blood glucose test result in mg/dL A blood glucose test result in mmol/L System is ready to record the EVENT ICON which correlate with your test result.

Your blood glucose result is higher than 900 mg/dL (50 mmol/L). Your blood glucose result is lower than 10 mg/dL (0.6 mmol/L).

No action is required.

No action is required.

Select an EVENT ICONs using +/-button before discarding the used test strip.

Repeat the test using a new test strip and/or check the system with the GlucoDr auto Control Solution. If the test result is "HI" again even though your system is working correctly, contact your healthcare professional immediately.

Repeat the test using a new test strip and/or check the system with the GlucoDr auto Control Solution. If the test result is "Lo" again even though your system is working correctly, contact your healthcare professional immediately.

Message









What it means.

A blood glucose test result stored in the memory.

Battery is low but you can still perform a few more tests. The energy level of the battery is too low to provide accurate test results. The average of blood glucose test results for the past 7 days.

No action is required.

Turn off the meter and replace the battery as soon as possible. Turn off the meter and replace the battery immediately. No action is required.

Action











No test result in memory.

The meter is used outside the proper range of temperature.

The used test strip was inserted in the test port.

There may be a problem with the test strip. It may have been damaged or removed during testing.

The blood sample or control solution was improperly applied or there was an electronical noise during the test.

No action is required.

Leave the meter at a temperature between 10~40°C (50~104°F) for at least 30 minutes before repeating the test.

Retest with a new test strip.

Retest with a new test strip. Do not remove the test strip until test result appears on the meter display. Retest with a new test strip.

Er5

Erb

Er7

Er8

Er9

The meter has an internal electric circuit problem.

The meter has a problem with strip connection.

The meter has a problem with strip connection.

Not enough blood or control solution was drawn into the test strip for a test or was applied after the test was started. Blood is applied to wrong direction into the test strip.

Contact your local distributor.

Contact your local distributor. See Troubleshooting Contact your local distributor.
See
Troubleshooting Guide.

Retest with a new test strip.

Apply blood to right direction into a new test strip.

Troubleshooting	Cause	Action	
The meter does not turn on after inserting a test strip.	Battery is dead.	Replace the battery.	
	The battery is installed incorrectly or there is no battery in the meter.	Check if battery is correctly installed with the positive "+" sign facing up. (See pages 34-35)	
	The test strip is inserted upside down or incompletely.	Insert the test strip correctly with the printed side facing up.	
	The meter may not be working properly.	Contact your local distributor.	
The meter does not start after applying the blood sample.	Not enough blood sample.	Retest with a new test strip.	
	The test strip may be damaged.	Retest with a new test strip.	
	Blood sample is applied after the meter was automatically turned off (5 minutes after last action).	Retest with a new test strip.	
	The meter may not be working properly.	Contact your local distributor.	

Specifications

42

Product Name	GlucoDr auto™ Blood Glucose Monitoring System		
Model Name	AGM-4000		
Assay Method	Electrochemical method		
Sample Type	Fresh capillary, venous, and arterial whole blood		
Sample Volume	$0.5\mu\ell$		
Measurement Range	10~900 mg/dL (0.6~50 mmol/L)		
Measurement Time	5 seconds		
Calibration	Plasma-equivalent		
Battery Type	One 3-volt lithium battery (coin cell type CR2032)		
Battery Life	Approximately 1,000 tests		
Unit of Measurement	mg/dL or mmol/L		
Operating Ranges	Temperature: 10~40 $^{\circ}\mathrm{C}$ (50~104 $^{\circ}\mathrm{F}$)		
	Relative Humidity: Less than 85%		
	Altitude: Up to 2500m (8202 feet)		
	Hematocrit: 20~60%		
Dimension	93.5 X 49.0 X 17.5 (mm), 3.7 X 1.9 X 0.69 (inches)		
Weight	Approximately 40g or 1.4 oz. (with battery)		
Display	37.0 X 42.0 (mm) LCD, 1.5 X 1.7 (inches) LCD		
Memory Capacity	500 test results (with date, time & event)		
PC Interface	USB		
Automatic Shutoff	5 minutes after last action		

For alugase consentration > 75 mg/dl (4.2 mmg/dl)

- The performance of the GlucoDr auto Test Strips has been evaluated in clinical tests. Accuracy:

The accuracy of the GlucoDr auto Blood Glucose Monitoring System was assessed by comparing blood glucose test results obtained from 140 diabetic patients with those obtained using YSI Model 2300 STAT Plus Glucose Analyzer.

For alugaco concentration < 75 mg/dl (4.2 mmal/L)

or glucose concentration < 75 mg/dL(4.2 mmol/L)			For glucose concentration $\geq 75 \text{ mg/dL}(4.2 \text{ mmol/L})$			
Accuracy Range		% of result	Accuracy Range		% of result	
Within ±5 mg/dL (0.28 mmol/L) Within ±10 mg/dL (0.56 mmol/L)		71 100	Within ±5%		59	
			Within ±10%		89	
Within ±15 mg/dL (0.83 mmol/L)		100	Within ±15%		100	
			Within ±20%		100	
Repeatability (us	ing venous wh	ole blood):	Repeatabi	lity (using co	ntrol):	
Level	SD	CV	Level	SD	CV	
42.7 mg/dL	2.3 mg/dL	5.3%	36.5 mg/dL	1.9 mg/dL	5.3%	
109.5 mg/dL	2.5 mg/dL	2.3%	125 mg/dL	3.1 mg/dL	2.4%	
149 mg/dL	3.3 mg/dL	2.2%	325 mg/dL	8.2 mg/dL	2.5%	
202 mg/dL	3.7 mg/dL	1.8%				

Explanation of Symbols



CAUTION



This product fulfills the requirements of Directive 98/79/EC on in vitro diagnostic medical device.



For in vitro diagnostic use



Do not dispose the instrument in the urban waste.



Consult User Manual