

Owner's Guide

BD Logic™ Blood Glucose Monitor



Distributed by: Becton Dickinson Canada Inc.
Oakville, ON L6H 6R5

BD, BD Logo and BD Logic are trademarks of
Becton, Dickinson and Company. © 2003 BD.
Franklin Lakes, NJ 07417

System and test strips manufactured for BD by
Nova Biomedical Corporation, Waltham, MA 02454

U.S. Patent No. 6,258,229 and other
U.S. and foreign patents pending.

Made in USA. P80098

You will notice these symbols on your vials of test strips and control solution as well as the label on the back of your BD Logic™ Blood Glucose Monitor. These symbols alert you to important information. Below is an explanation of what they mean:



Stands for "In Vitro Diagnostic" use. This means the product is intended to be used outside of the body.



This symbol means "Caution." It is on your vial of strips and control solution to warn you to read your instructions before using them.

NEED TO CONTACT US?

Call BD Consumer Services toll-free, 24 hours a day, 7 days a week, in Canada at 1-888-BDCARES (1.888.232.2737)* or visit our website at www.BDdiabetes.com.

*NOT FOR EMERGENCY OR MEDICAL INFORMATION.

Welcome

Thank you for choosing the BD Logic™ Blood Glucose Monitor. This Owner's Guide contains important information on the monitor and how it works. Please read it carefully before using your new monitor.

The BD Logic™ Blood Glucose Monitor is designed to be convenient and easy to use. It gives accurate results in just 5 seconds using a very small blood sample. This small blood sample allows you to use a thinner lancet because not as much blood is needed to do a blood sugar test. BD offers the thinnest lancet available with its BD Ultra-Fine™ 33 Lancet, resulting in less pain. In addition, the new BD Logic™ Blood Glucose Monitor has a memory that stores your blood sugar test results and has optional features, such as insulin recording and mealtime averaging, to help you and your healthcare professional manage your diabetes care.

Helping people with diabetes live healthy lives has been BD's goal for over 75 years. The BD Logic™ Blood Glucose Monitor is intended to provide the comfort and convenience you need in managing your diabetes.

Before you get started, it is important to complete the Warranty Registration Card included in your Kit and mail it back to BD. Doing this will help us better serve your needs.

If you need to contact us, please call BD Consumer Services toll-free, 24 hours a day, 7 days a week, in Canada at 1.888.BDCARES (1.888.232.2737)* or visit our website at www.BDdiabetes.com.

* NOT FOR EMERGENCY OR MEDICAL INFORMATION.

Important Information



- Before you begin using your new BD Logic™ Blood Glucose Monitor, please read all of the instructions provided in this Owner's Guide.
- Use the monitor only if the protective seal on the box containing your BD Logic™ Blood Glucose Monitor is unbroken.
- Perform all quality control checks recommended in your Owner's Guide.
- Consult with your diabetes healthcare professional and follow his or her guidance for your blood glucose monitoring routine.
- These recommendations apply to all blood glucose monitors.
- Degree of safety in the presence of flammable anesthetic mixture: Not suitable for use in the presence of flammable anesthetic mixture with air or with oxygen or nitrous oxide.

Your BD Logic™ Blood Glucose Monitor

- Is intended for use outside the body (*in vitro* diagnostic use).
- Should only be used with BD™ Test Strips and BD™ Control Solution.
- Should be used for testing glucose (sugar) and only with fresh capillary whole blood samples.
- Should not be used to diagnose diabetes or to test newborns.
- Should not be stored in the refrigerator or in the car.

CAUTION: The BD Logic™ Blood Glucose Monitor contains small parts. Keep the monitor out of reach of small children and pets.

Table of Contents

Getting to Know Your BD Logic™ Blood Glucose Monitor

Monitor Components	2
Kit Contents.....	3
Monitor Display	4
Test Strips	5
Lancet Device.....	7

Getting Started

Setting the Time, Date, and Beeper	8
<i>How to Set the Time, Date, and Beeper</i>	9
Coding Your Monitor	12
<i>Why Coding Your Monitor Before Testing Is Necessary</i>	12
<i>How to Code Your Monitor</i>	13
Running a Control Solution Test.....	14
<i>Why Running a Control Solution Test Is Important</i>	14
<i>How to Run a Control Solution Test</i>	16

How to Test Your Blood Glucose

Preparing the Lancet Device.....	21
Inserting the BD™ Test Strip	23
Getting and Applying a Blood Sample to the BD™ Test Strip	24
Understanding Your Test Result.....	26

How to Use Your Monitor's Basic Memory Functions

What Are the Basic Memory Functions?.....	28
<i>Memory</i>	28
<i>14-Day Average</i>	28
Reviewing Your Basic Memory Functions.....	29

How to Use Your Monitor's Optional Memory Functions

What Are the Optional Memory Functions?.....	31
<i>Insulin Recording</i>	32
<i>7-Day Average</i>	32
<i>Time-Specific Averages</i>	33
<i>Marking</i>	36
Setting the Optional Memory Functions	38
Labeling Your Insulin Types.....	42
Recording Your Insulin Doses.....	43
Marking a Blood Glucose Test.....	45
Marking an Insulin Dose	46
Reviewing Your Optional Memory Functions.....	48

Summary: How to Review Your Basic and Optional Memory Functions

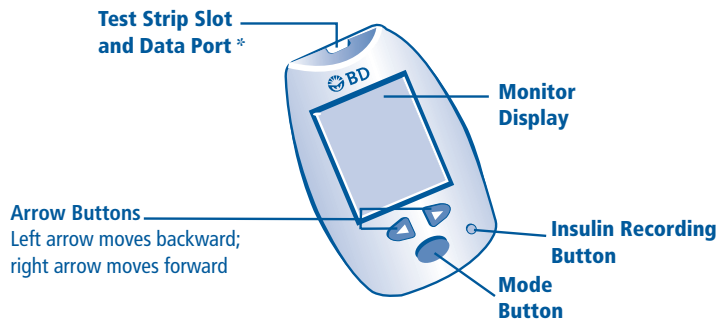
.....	52
-------	----

Additional Information

Display Messages and Troubleshooting Guide.....	53
Caring for Your Monitor	59
<i>Storing and Cleaning</i>	59
<i>Battery</i>	59
Healthcare Precautions and Limitations.....	62
Conditions That May Affect Results.....	63
3-Year Warranty	63
Specifications	64
How to Contact Us.....	65

Getting to Know Your BD Logic™ Blood Glucose Monitor

Monitor Components



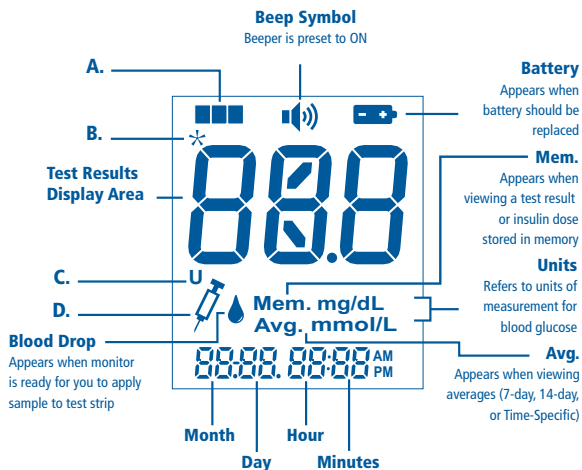
* Accepts a cable to download stored data to a personal computer.

Kit Contents



Monitor Display

When you turn the BD Logic™ Blood Glucose Monitor on, the “all segments” display appears briefly. This tells you that all the display segments are working properly.



Symbols for Optional Memory Functions That Require Setup

A. Time-Specific Averages Symbol

B. Marking Symbol

Appears when viewing a marked blood glucose test or marked insulin dose.

C. U Symbol

Appears when units of insulin are entered.

D. Insulin Symbol

Appears when recording or reviewing insulin injections.

Test Strips

BD™ Test Strips are designed for use with your BD Logic™ Blood Glucose Monitor or BD Latitude™ Diabetes Management System only. Use each test strip only once, then discard. Do not reapply blood to the test strip.

Test Strips:

- Require a very small blood volume (0.3 µL).

New BD™ Test Strip Requires	Other Test Strips Require			
○	●	●	●	●
0.3 µL	10 µL	4 µL	2 µL	1 µL

Not actual size. Scale is relative.

- Automatically draw blood into the test area of the strip.
- Can be handled with clean, dry hands without affecting glucose readings.



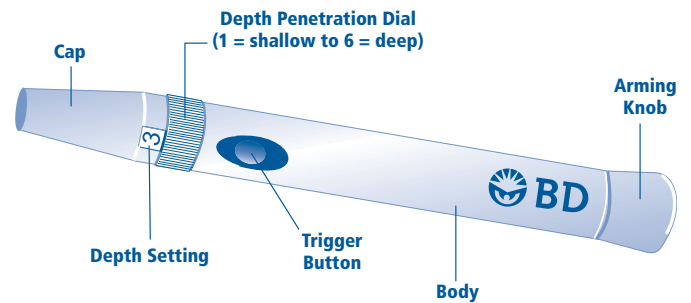
Important BD™ Test Strip Information

- Use only BD™ Test Strips when testing.
- Remove the test strip from the vial only when ready to test.
- Store test strips at room temperature below 30°C (86°F). Do not refrigerate or freeze.
- Test strips should be stored only in original vial.
- Keep vial cap closed tightly after each use.
- Do not use the test strip if the expiration date has passed, for this may cause inaccurate results.
- Test strips should only be stored for 3 months after opening the vial. When first opening a new vial of test strips, count forward 3 months and write that date on vial. Discard any remaining test strips after the date you have written on the vial.
- Do not tamper with test strip.

CAUTION: The test strip vial contains small parts. Keep the test strip vial away from children and pets.

Lancet Device

The diagram below shows the components of the BD™ Lancet Device.



Getting Started

Setting the Time, Date, and Beeper

Having the correct time and date of each blood glucose test result and insulin dose helps you and your healthcare professional track changes in your therapy. It is important to set the correct time and date so you have records of when you test and inject. If you do not set the time and date, all blood glucose monitoring results and insulin doses will be marked and will not be included in averages (*refer to page 36*).

Your BD Logic™ Blood Glucose Monitor offers a beeper function that is preset to “On.” This tells you when enough blood is applied to the test strip, when a test is completed, and prompts you through other steps in using your monitor.

NOTE: Remember to adjust time and date settings as needed to match the local time or daylight savings time and after you replace the battery.

► HOW TO SET THE TIME, DATE, AND BEEPER

Monitor is off, with no test strip inserted in the test strip slot.

1. Begin Setup:

Press and continue to hold the **Mode** button until you hear a short beep and see the flashing hour displayed. Release the **Mode** button.



Flashing Hour Display

2. Set Hour:

Press the **right** or **left** arrow button until the correct hour (with AM or PM) appears.



Set Hour (Example)

3. Press the **Mode** button *briefly* to confirm your choice and to advance to set the minutes.

4. Set Minutes:

Press the **right** or **left** arrow button until the correct minutes appear.



Set Minutes (Example)

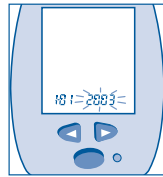
5. Press the **Mode** button *briefly* to confirm your choice and to advance to set the year.

(Continued on next page.)

6. Set Year:

Press the **right** ▶ or **left** ◀ arrow button until the correct year appears.

7. Press the **Mode** ● button *briefly* to confirm your choice and to advance to set the month.



*Set Year
(Example)*

8. Set Month:

Press the **right** ▶ or **left** ◀ arrow button until the correct month appears.

9. Press the **Mode** ● button *briefly* to confirm your choice and to advance to set the day.



*Set Month
(Example)*

10. Set Day:

Press the **right** ▶ or **left** ◀ arrow button until the correct day appears.

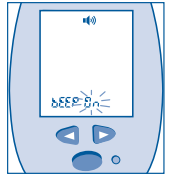
11. Press the **Mode** ● button *briefly* to confirm your choice and to advance to set the beeper. A long beep will sound.



*Set Day
(Example)*

12. Set Beeper:

Beeper is preset to "On." Press the **right** ▶ or **left** ◀ arrow button to select the beeper setting (ON or OFF).



*Set Beeper
(Example)*

NOTE: Instructions in this guide assume the beeper is set to "On." If you have set the beeper to "OFF," you will not hear the beep as described throughout the guide.

13. Press the **Mode** ● button *briefly* to confirm your choice and to advance to the end of setup.

14. End Setup:

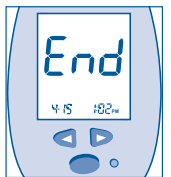
The display shows your set time and date. Setup is complete.

15. Return to Setup:

Press the **Mode** ● button *briefly* to return to start of setup. The flashing hour that you set is displayed.

16. Turn Off Monitor:

Press and hold the **Mode** ● button until the monitor turns off, OR the monitor will turn off automatically after 1 minute.



*End of Setup
(Example)*

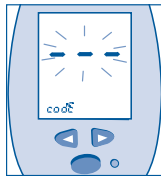
Coding Your Monitor

► WHY CODING YOUR MONITOR BEFORE TESTING IS NECESSARY

Your BD Logic™ Blood Glucose Monitor must be manually “coded” to match the vial of test strips you will be using in order to provide accurate blood glucose test results.

You should code your monitor:

- When you first receive your new monitor, before you test your blood glucose.
- If the monitor display shows flashing “---” as pictured.
- Before using each new box of test strips.

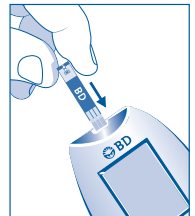


IMPORTANT: If the code number on the display does not match the code number on the test strip vial, the test results may not be accurate.

► HOW TO CODE YOUR MONITOR

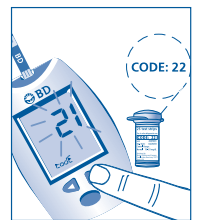
Monitor is off, with no test strip inserted in the test strip slot.

1. Insert a BD™ Test Strip into the test strip slot. The monitor turns on and briefly displays the “All Segments” display.



Insert Test Strip

2. While the flashing code number appears on the display, code the monitor to match the test strip being used. Press the **right** ► or **left** ◀ arrow button (within 3 seconds) to match the code printed on the test strip vial.




Code the Monitor

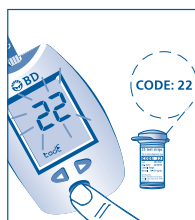
When you first use your monitor, the display shows “---.” This means the monitor is not coded and needs to be coded.

NOTE: If your monitor advances to the blinking blood drop before you coded your monitor to match the test strips being used, take out the test strip from the test strip slot and reinsert to start again.

(Continued on next page.)

- When the codes match, press the Mode  button. A blinking blood drop shows that the monitor is ready for you to test. To run a control solution test, refer to page 16. To run a blood glucose test, refer to page 21.

To turn off the monitor, remove and discard the used test strip. The monitor turns off automatically.



Finish Coding

Running a Control Solution Test

► WHY RUNNING A CONTROL SOLUTION TEST IS IMPORTANT

The control solution test confirms that your monitor and test strips are working correctly. A control solution test is similar to a blood glucose test, except you use BD™ Control Solution and not a blood sample.

You Should Run a Control Solution Test:

- Before using your monitor for the first time and at least once a week thereafter.
- Each time you open a new box of BD™ Test Strips.
- If you leave the test strip vial cap open.
- If you drop your monitor.
- If your results do not match the way you feel, or you think your results are higher or lower than expected.
- To check the performance of the monitor and test strips.

Important Control Solution Information

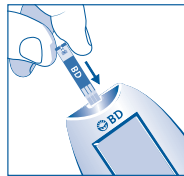
- Use only the BD™ Control Solution for the test.
- Check the expiration date on the control solution vial. Do not use the control solution if the expiration date has passed.
- Store only for 3 months after first opening. When you open a new vial of control solution, count forward 3 months and write that date on the label of the control solution vial. Discard any remaining solution after the date you have written on the vial.
- Store the control solution tightly closed at room temperature below 30°C (86°F). Do not refrigerate or freeze.
- Shake control solution well before using.

CAUTION: The BD™ Control Solution range printed on the test strip vial is for control solution only. It is used to test the performance of the monitor and test strip. It is not a recommended range for your blood glucose level.

▶ HOW TO RUN A CONTROL SOLUTION TEST

Monitor is off, with no test strip inserted in the test strip slot.

1. Insert a BD™ Test Strip into the test strip slot. The monitor turns on and displays the code number.



Insert Test Strip


2. Match the code number on the display with the code on the test strip vial.

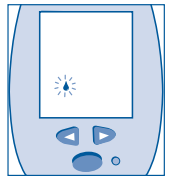
If the codes match, you are ready to begin testing.

If the codes do not match, review “Coding Your Monitor” (refer to page 12).





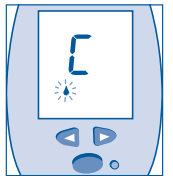
*Match Codes
(Example)*

3. A blinking blood drop  tells you that the monitor is ready for the next step.



*Blinking
Blood Drop*

4. Mark as a control solution test by pressing the right  or left  arrow button until a “L” appears.

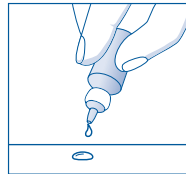


*Mark as Control
Solution Test*

IMPORTANT: It is important to mark a control solution test so the test result does not appear to be one of your blood glucose test results.

(Continued on next page.)

5. Shake the control solution vial and discard a drop before use. Squeeze a drop of control solution onto a clean, hard, dry surface.



Squeeze Drop of Control Solution

6. While holding the monitor, touch the edge of the inserted test strip to the drop of control solution. A short beep sounds and the monitor begins to count down from 5 to 1.



Touch Edge of Test Strip to Control Solution

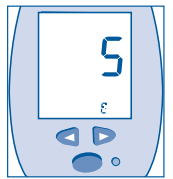


Correct



Incorrect

7. The display counts down from 5 seconds as the monitor performs the test.



Test Countdown

8. When the test is finished, a long beep sounds and the monitor displays the result.



Test Result (Example)

9. Compare the result on the display with the range printed on the test strip vial. If the result falls within the range, your monitor and test strips are working correctly.



(Example)

10. Remove and discard the used test strip. The monitor turns off automatically.

Out-of-range results may be caused by the following:

- You may not be doing the test properly. Retest and follow the instructions carefully.
- The BD Logic™ Blood Glucose Monitor may not be coded properly to match the test strips being used.
- The control solution may have expired or have been contaminated. Check the expiration date on the control solution vial. Control solution is good for only 3 months after opening. Make sure the control solution vial is closed when not in use.
- The test strip may have expired. Check the expiration date on the test strip vial.
- The test strip may have been damaged. This can be caused by extreme temperatures or by leaving the test strip vial cap open. Retest using a new test strip.
- The BD Logic™ Blood Glucose Monitor may not be working properly.

NOTE: If the control solution test result is outside the range (is either higher or lower), your monitor and test strip may not be working as a system. Repeat the test using a new test strip.

Do not use the monitor until test results fall within the appropriate range. If the problem continues, call BD Consumer Services toll-free, 24 hours a day, 7 days a week, in Canada at 1.888.BDCARES (1.888.232.2737)* for help.

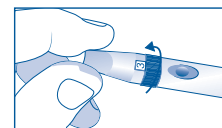
* NOT FOR EMERGENCY OR MEDICAL INFORMATION.

How to Test Your Blood Glucose

Preparing the Lancet Device

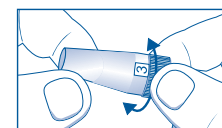
Before testing, wash your hands with soap and warm water. Dry thoroughly.

1. Unscrew the cap from the BD™ Lancet Device.



Unscrew Cap

2. Select the penetration depth by turning the cap dial from 1 (shallow) to 6 (deep).

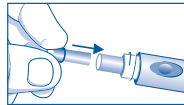


Select Penetration Depth

Skin Type	Suggested Setting
Soft	1 - 2
Average	3 - 4
Callused	5 - 6

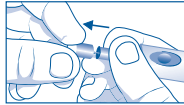
(Continued on next page.)

3. Insert a BD Ultra-Fine™ 33 Lancet into the lancet holder.



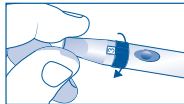
Insert Lancet

4. Remove the lancet cover while holding the base of the lancet.



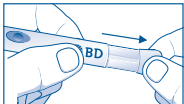
Remove Lancet Cover

5. Screw the cap back onto the lancet device.



Screw Cap Back On

6. Pull out the arming knob as far as it will go and then release it. The lancet device is now armed.

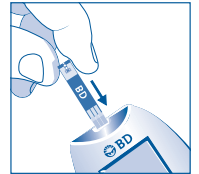


Arm Lancet Device

Inserting the BD™ Test Strip

Monitor is off, with no test strip inserted in the test strip slot.

1. Insert a BD™ Test Strip into the test strip slot. The monitor turns on and briefly displays “All Segments.”



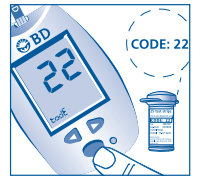
Insert Test Strip

*Edge to Apply
Blood Drop*

*End to Insert
Into Monitor*

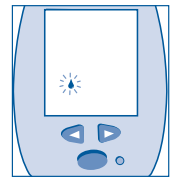


2. Match the code number on the display with the code on the test strip vial. If the codes do not match, press the **right** ► or **left** ◀ arrow button to match the code printed on the test strip vial. When the codes match, press the **Mode** ● button *briefly* (refer to page 12 for “Coding Your Monitor”).



*Match Codes
(Example)*

3. A blinking blood drop 🩸 tells you that the monitor is ready for the next step.



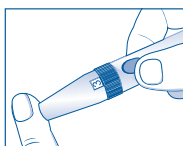
*Blinking Blood
Drop*

NOTE: Use only BD Test Strips when testing.

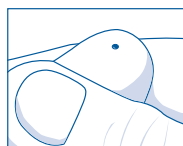
(Continued on next page.)

Getting and Applying a Blood Sample to the BD™ Test Strip

1. Place the armed BD™ Lancet Device securely on the side of your finger and press the trigger button to activate the device. If necessary, gently squeeze your finger to help form a drop of blood.



Lance Finger

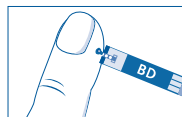


Correct Blood Drop

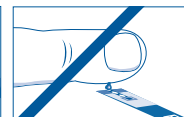
NOTE: Lancets are for one-time use only. Use a new, sterile lancet each time you test. Test different areas on your fingertips to avoid developing calluses. After completing the blood test, remove the cap from the BD™ Lancet Device, carefully place the lancet cover on the lancet and remove the lancet. Dispose of the used lancet per your local disposal regulation where applicable.

CAUTION: Your BD™ Lancet Device and BD™ Lancets are for your personal use only. DO NOT share with others. Sharing the lancet device or lancets can transmit serious, even grave infections. To avoid accidental sticks, do not store used lancets in the device after testing or arm lancet device with a new sterile lancet unless ready to use.

2. Apply blood drop to the edge of the test strip. The blood is drawn into the test strip. Hold your finger to the edge of the test strip until you hear a short beep or see the monitor display begin to count down.



Correct



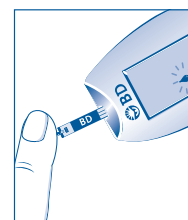
Incorrect



Completely Filled



Not Completely Filled



Apply Blood Drop

3. The display counts down from 5 seconds as the monitor performs the test.



Countdown

(Continued on next page.)

4. A long beep sounds and the result is displayed and stored in the monitor's memory. You should also write your result down in your logbook.
5. Remove and discard the used test strip. The monitor turns off automatically.
6. Remove the used lancet from the lancet device. Follow your local disposal regulations where applicable.



*Test Result
(Example)*

If the test result is higher than 33.3 mmol/L, the monitor sounds 3 quick beeps and the display will read "HI." You may have high blood sugar. Retest your blood glucose immediately using a new test strip. If your reading is still high, you should treat as prescribed by your healthcare professional and/or contact your healthcare professional immediately.



*Blood Glucose
Test Higher Than
33.3 mmol/L*

If the test result is lower than 1.1 mmol/L, the monitor sounds 3 quick beeps and the display will read "LO." You may have low blood sugar. Retest your blood glucose immediately using a new test strip. If your reading is still low, you should treat as prescribed by your healthcare professional and/or contact your healthcare professional immediately.



*Blood Glucose
Test Lower Than
1.1 mmol/L*

Understanding Your Test Result

Your blood glucose test result is displayed on the monitor.



*Test Result
(Example)*

NOTE: Test results greater than 13.3 mmol/L may mean high blood sugar (hyperglycemia). Test results lower than 3.3 mmol/L may mean low blood sugar (hypoglycemia). If you get results in these ranges, retest your blood glucose. If your reading is still in these ranges, you should treat as prescribed by your healthcare professional and/or contact your healthcare professional immediately.

How to Use Your Monitor's Basic Memory Functions

The Basic Memory functions help you and your healthcare professional track changes in your blood glucose levels over time.

What Are the Basic Memory Functions?

► MEMORY

Your BD Logic™ Blood Glucose Monitor has a memory that stores up to 250 of your blood glucose test results. You can view up to 30 of your most recent test results on your monitor display.



► 14-DAY AVERAGE

You can review the average of all test results taken in the last 14 days. The average will not include marked test results or control solution test results. (For information on "Marking," refer to page 36.)

NOTE: In computing averages, the monitor will use 33.3 mmol/L for any "H I" results and 1.1 mmol/L for any "L 0" results.


Reviewing Your Basic Memory Functions

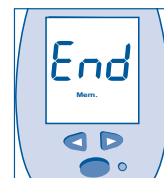
Monitor is off, with no test strip inserted in the test strip slot.

1. Press the **Mode**  button *briefly* to turn the monitor on.
2. Your **Most Recent Blood Glucose Test Result** with date and time of testing is shown on the display. (To set the correct date and time, refer to page 8.)
3. If you wish to review up to 30 stored test results, continue to press the **left**  arrow button.




Most Recent Blood Glucose Reading (Example)

"End" is displayed after the last recorded test result. To return to the most recent test result, press the **left**  arrow button.

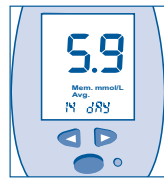


End of Stored Test Results



4. Press the **Mode**  button *briefly* to advance to your **14-Day Blood Glucose Test Average**.

(Continued on next page.)

5. The display shows the average of all test results taken in the last 14 days. The average will not include marked or control solution test results.



14-Day Average
(Example)

6. Press the **Mode**  button *briefly* to return to your most recent blood glucose test result.
7. To turn off the monitor, press and hold the **Mode**  button until the monitor turns off, OR the monitor will turn off automatically after 1 minute.

How to Use Your Monitor's Optional Memory Functions

Your BD Logic™ Blood Glucose Monitor has Optional Memory functions that can help you and your healthcare professional manage your diabetes.

The Optional Memory functions allow you to:

1. Record and review your insulin injections.
2. Look at the 7-Day Average of your blood glucose test results.
3. View Time-Specific Averages of your blood glucose test results.
4. Mark specific blood glucose test results and insulin doses.

NOTE: The Optional Memory functions are included with your monitor. These functions are turned off when you receive your new monitor and must be manually set up. (*Refer to page 38 for setup.*)

What Are the Optional Memory Functions?

► INSULIN RECORDING

Your BD Logic™ Blood Glucose Monitor allows you to record and review the insulin dose and type that you inject each day. You can review up to 30 of your 250 stored insulin records on your monitor display. An advantage of this function is that you can compare changes in the results of your blood glucose test results to your insulin injections. Once you have set the Insulin Recording function to “**ON**,” you can record and save your insulin injections by insulin type and dose.

- The Insulin Recording function is turned off when you receive your new monitor. To set up the Insulin Recording function, refer to page 38.
- After you set up the function, you can review your insulin injections. For complete information on how to review this and other Optional Memory functions, refer to page 48.

► 7-DAY AVERAGE

Your BD Logic™ Blood Glucose Monitor allows you to review the average of all test results taken in the last 7 days. The average will not include marked or control solution test results. (*For information on “Marking,” refer to page 36.*)

The 7-Day Average function is turned off when you receive your new monitor. It is automatically turned ON when you set the Time-Specific Average function to ON.

- To set up the 7-Day Average function, refer to page 38.
- After you set up the function, you can review your 7-Day Average. For complete information on how to review this and other Optional Memory functions, refer to page 48.

► TIME-SPECIFIC AVERAGES

This function is designed to help you adjust your insulin dose based on a pattern of blood glucose values over 3 to 5 days (“pattern-control” of your insulin). It provides information to help make these insulin adjustments.

You can use the monitor to compute the average of 3 blood glucose test results that you took at roughly the same time of day over the last few days. You can select the 2-hour time period that you want this average to be drawn from (ie, before or after meals, before or after exercise).

This function lets you and your healthcare professional:

- Choose up to 4 time periods during the day for which you want to track results. The monitor labels these times as A1, A2, A3, and A4.
- View your Time-Specific Averages on the monitor display.
- View the 3 test results that make up each Time-Specific Average.

NOTE: To get a Time-Specific Average, your 3 tests must be performed on 3 of the last 5 days.

An example of how you may use the Time-Specific Average function is shown on the next page.

Example:

For your next appointment, your doctor wants to know, on average, how high your blood glucose has been running before lunch so you and your doctor can decide whether your diabetes therapy needs adjusting. The Time-Specific Average function will compute that number for you. Say your blood glucose at lunchtime over the last few days has been 10.6 mmol/L, 12.1 mmol/L, and 8.1 mmol/L. The Time-Specific Average function will show you that your blood glucose has been 10.3 mmol/L for this time of day.

How This Time-Specific Average Was Determined:

In the example, you chose 12:00 PM for your A2 Average time. This is the time you test your blood glucose before lunch.

Your A2 Average is 10.3 mmol/L. This value averages the last 3 blood glucose tests taken between 11:00 AM and 1:00 PM (1 hour before and 1 hour after 12:00 PM). The 3 boxes ■■■ represent a Time-Specific Average, the average of 3 test results.



*Time-Specific Average (A2)
(Example)*

You can also view the 3 individual test results, with date and time, that make up the A2 Average. Each flashing box represents one of the 3 test results that makes up the average.



*3 Individual Blood Glucose Test Results
(Example)*

The Time-Specific Average function is turned off when you receive your new monitor. You must set up this function to turn it on. When you turn on the Time-Specific Average function, you will automatically get the 7-Day Average function.

- To set up the Time-Specific Average function, refer to page 39.
- After you set up the function, you can review your Time-Specific Averages. For complete information on how to review this and other Optional Memory functions, refer to page 48.

NOTE: In computing averages, the monitor will use 33.3 mmol/L for any “HI” results and 1.1 mmol/L for any “LO” results.

▶ MARKING

Marking allows you to identify specific blood glucose test results or insulin doses in the monitor's memory.

- The Marking function is turned off when you receive your new monitor. To set up the Marking function, refer to page 41.
- For how to mark a blood glucose test, refer to page 45.
- For how to mark an insulin dose, refer to page 46.

Marking Blood Glucose Test Results:

Some examples of how you may use the Marking function to mark blood glucose test results are shown below.

- You may wish to mark a test result to identify that it was taken after eating.
- You may have retested to confirm a previous reading and do not want the result added to your averages.



*Marked Blood
Glucose Test
Result
(Example)*

NOTE: Marked test results are not included in any averages. If you have not set the time and date, all blood glucose monitoring results and insulin doses will be marked and will not be included in averages.

Marking Insulin Doses:

Some examples of how you may use the Marking function to mark an insulin dose are shown below.

- You may wish to mark a dose that you are recording to indicate that you entered the information at a different time than you actually injected.
- You may wish to indicate that a dose amount was different than what you normally take at that time.






*Marked
Insulin Dose
(Example)*

Setting the Optional Memory Functions

Monitor is off, with no test strip inserted in the test strip slot.

1. Begin Setup:



Press and continue to hold the **Mode**  button. You will hear 2 short beeps and see  and the word “OFF.” Release the **Mode**  button.



Insulin
Recording


NOTE: If you release the **Mode**  button too soon, turn off your monitor by pressing and holding the **Mode**  button. Repeat step 1.

2. Set Insulin Recording Function:



The Insulin Recording function is preset to “OFF.” Press the **right**  or **left**  arrow button to select the setting (“ON” or “OFF”).



Set Insulin
Recording


3. Press the **Mode**  button *briefly* to confirm your choice and to advance to set Time-Specific Averages.

4. Set Time-Specific Averages:

The Time-Specific Averages function automatically comes with the 7-Day Average function. The Time-Specific Averages function is preset to “OFF.” Press the **right**  or **left**  arrow button to select the setting (“ON” or “OFF”).





Set Time-Specific
Averages

5. Press the **Mode**  button *briefly* to confirm your choice. If you set Time-Specific Averages to “OFF,” skip to step 9. If you set to “ON,” you will advance to set the first of 4 times (A1, A2, A3, A4).

NOTE: If you set the Time-Specific Averages function to “ON” and do not set the times for A1 through A4, your monitor will default the times to 7:00 AM, 12:00 PM, 6:00 PM, and 10:00 PM.


(Continued on next page.)

6. Set Time for A1:

Press the **right**  or **left**  arrow button to select the time when you usually do your first blood glucose test. The time will advance in 15-minute steps. The Time-Specific Average will include test results within a 2-hour range: 1 hour before and 1 hour after the time you select.



Set Time for Your First Time-Specific Average (A1)

7. Press the Mode  button *briefly* to confirm your choice and to advance to set time for A2.




8. Set Time for A2 Through A4:

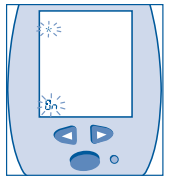
Repeat steps 6 and 7. When complete, you will advance to set Marking function.



Set Time for A2

9. Set Marking Function:

The Marking function is preset to “OFF.” Press the **right**  or **left**  arrow button to select the setting (“ON” or “OFF”). Press the **Mode**  button *briefly* to confirm your choice and to advance to end of setup.



Set Marking Function



10. End of Setup:

Optional Function Setup is complete. The word “End” will be displayed on your monitor.




End of Optional Function Setup

11. Return to Setup:

Press the **Mode**  button *briefly* to return to start of setup. You will see  and the word “ON” or “OFF,” indicating whether you set the Insulin Recording function to on or off.

12. Turn Off Monitor:

Press and hold the **Mode**  button until the monitor turns off, OR the monitor will turn off automatically after 1 minute.

Labeling Your Insulin Types

The labels P1, P2, P3, and P4 are used by your monitor to identify up to 4 different types of insulin. You decide what label to use for each type of insulin you take. Keep a record of the labels you have chosen for each insulin type.

The chart below shows examples of labeling up to 4 different types of insulin.

Example 1:	Example 2:	Example 3:	Example 4:
Uses 1 insulin type only	Uses 2 insulin types	Uses 3 insulin types	Uses 4 insulin types
P1 <u>NPH</u>	P1 <u>NPH</u>	P1 <u>NPH</u>	P1 <u>NPH</u>
P2 _____	P2 <u>Humalog*</u>	P2 <u>Humalog*</u>	P2 <u>Humalog*</u>
P3 _____	P3 _____	P3 <u>Regular</u>	P3 <u>Regular</u>
P4 _____	P4 _____	P4 _____	P4 <u>30/70</u>

A blank chart like this can be found in the back of your logbook. You can use it to record what labels you are using for your insulin types.






* Humalog is a trademark of Eli Lilly and Company.

Recording Your Insulin Doses

NOTE: The monitor will not enter into insulin recording mode if:

- The test strip is in the test strip slot, or
- The Insulin Recording function has not been turned on in the Optional Memory function Setup. (Refer to page 38 for setup.)

Monitor is off, with no test strip inserted in the test strip slot.

1. Inject your insulin.
2. After you inject your insulin, press and release the **Insulin Recording**  button. The monitor turns on and advances to insulin recording. The  and a flashing "1" appear on the display.
3. Press the **left**  or **right**  arrow button to select the label (P1, P2, P3, or P4) that matches the type of insulin you injected. (Refer to page 42 for labeling your insulin.)
4. Press the **Mode**  button *briefly* to confirm your choice and to advance to record your insulin dose.








(Continued on next page.)



Insulin Recording



Select Insulin Type

5. Press the **right**  arrow button to enter your insulin units. Use the **right**  or **left**  arrow buttons to adjust units up or down.
6. To save the insulin dose, press the **Mode**  button *briefly*, or press the **Insulin Recording**  button. A long beep sounds to confirm that the insulin dose was saved. (Refer to page 46 for marking your insulin dose.)
7. If you inject more than one type of insulin at one time, turn off the monitor by pressing and holding the **Mode**  button. Repeat steps 2 through 6 to record your next insulin type.
8. You have finished recording your insulin information. To turn off your monitor, press and hold the **Mode**  button until the monitor turns off, OR the monitor will turn off automatically after 1 minute.



Select
Insulin Dose

NOTE: It is recommended that you record your insulin within 10 minutes after injecting to make sure it is recorded with the correct date and time.





Marking a Blood Glucose Test

A blood glucose test can be marked after completing a test. For an explanation of situations in which you may wish to mark a blood glucose test, refer to page 36.

1. Test your blood glucose. (Refer to page 21 for how to test.)
2. After a blood drop is applied to the test strip, the display counts down from 5 seconds and shows your test result.



Blood Glucose
Test Result
(Example)

3. To mark your test result, press the **right**  or **left**  arrow button. An asterisk (*) appears, to confirm that the test result is marked. To unmark the test result, press the **right**  or **left**  arrow button until the asterisk disappears.



Marked Blood
Glucose Test Result
(Example)

(Continued on next page.)

4. To save the marked test result, press the **Mode** button.

NOTE: Once a marked test result or insulin dose is saved, you cannot unmark. Marked tests are not included in averages.

5. The marked test result is stored in the monitor's memory.
6. To turn off the monitor, press and hold the **Mode** button until the monitor turns off, OR the monitor will turn off automatically after 1 minute.

Marking an Insulin Dose

An insulin dose can be marked after the injection is recorded. For an explanation of situations in which you may wish to mark an insulin dose, refer to page 37.

1. Record your insulin dose. (Refer to page 43 for how to record your insulin doses.)

2. After you press the **Mode** button briefly or press the **Insulin Recording** button, a long beep sounds to confirm that the insulin dose was saved.

3. To mark your insulin dose, press the **right** or **left** arrow button. An asterisk (*) appears, to confirm that the dose is marked. Marking is complete.




*Marked
Insulin Dose
(Example)*

4. To turn off the monitor, press and hold the **Mode** button until the monitor turns off, OR the monitor will turn off automatically after 1 minute.




Reviewing Your Optional Memory Functions

Monitor is off, with no test strip inserted in the test strip slot.

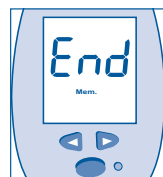
1. Press the **Mode**  button *briefly* to turn the monitor on.
2. **Your Most Recent Blood Glucose Test Result** with date and time of testing is shown on the display. (*To set the correct date and time, refer to page 8.*)



*Most Recent
Glucose Reading
(Example)*

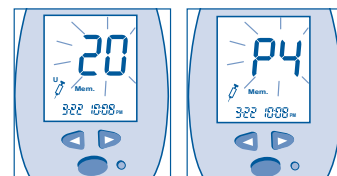
3. If you wish to review up to 30 stored test results, continue to press the **left**  arrow button.
“**End**” is displayed after the last recorded test result. To return to your most recent test result, press the **left**  arrow button.
4. Press the **Mode**  button *briefly* to advance to the next function.

If you have set the Insulin Recording function to “**On**,” proceed to next step. If you have not set the Insulin Recording function, skip to step 8.






*End of Stored
Test Results*

5. **Your Last Insulin Record** with date and time of recording is shown on the display. The display will alternate between insulin dose and insulin type.



*Insulin Record
(Example)*


6. If you wish to review up to 30 stored insulin records, continue to press the **left**  arrow button.
“**End**” is displayed after the last insulin record. To return to your most recent insulin record, press the **left**  arrow button.
7. Press the **Mode**  button *briefly* to advance to the next function.
8. If you have set the Time-Specific Averages function to “**On**,” you will automatically get 7-Day Average. If you have not set this function, skip to step 10.

Your 7-Day Blood Glucose Average is displayed showing the average of all test results taken in the last 7 days. The average will not include marked or control solution test results.



*7-Day Average
(Example)*

(Continued on next page.)


9. Press the **Mode**  button *briefly* to advance to the next function.

10. Your **14-Day Blood Glucose Average** is displayed showing the average of all test results taken in the last 14 days. The average will not include marked or control solution test results.



14-Day Average
(Example)


11. Press the **Mode**  button *briefly* to advance to the next function.

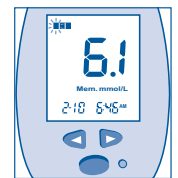
If you have set the Time-Specific Averages function to “,” proceed to next step. If you have not set the Time-Specific Averages function, skip to step 16.

12. Your first **Time-Specific Average (A1)** is displayed. This is the average of 3 tests taken during the 2-hour time period that you set.




Time-Specific
Average A1
(Example)

13. To review the individual 3 test results that make up the A1 average, press the **left**  arrow button. “**End**” is displayed after the last test result.




3 Individual Blood Glucose Test Results
(Example)


14. Press the **Mode**  button *briefly* to advance to your next Time-Specific Average A2. Repeat steps 12 and 13 to review your Averages A2 through A4.

















Time-Specific
Average A2
(Example)

15. Press the **Mode**  button *briefly* to return to your most recent blood glucose test result.

16. Memory Review is now complete.

17. To turn off the monitor, press and hold the **Mode**  button until the monitor turns off, OR the monitor will turn off automatically after 1 minute.




Summary: How to Review Your Basic and Optional Memory Functions

STEPS	RESULT	DISPLAY	SETUP REQUIRED?
Press Mode 	Monitor turns ON		No
Press  	Review up to Last 30 Test Results		No
Press Mode 	Review up to Last 30 Insulin Doses (if turned ON)		Yes (see page 38)
Press Mode 	Review 7-Day Average (if turned ON)		Yes (see page 38)
Press Mode 	Review 14-Day Average		No
Press Mode 	Review Time-Specific Average (if turned ON)		Yes (see page 38)
Press and hold Mode 	Monitor turns OFF		






Additional Information






Display Messages and Troubleshooting Guide



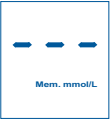
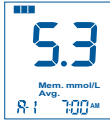

This section addresses the messages that appear on your display, what they mean, and what action you need to take.







DISPLAY	WHAT IT MEANS	WHAT TO DO
	System Check. Verifies that all segments are working. Appears when: <ul style="list-style-type: none"> • Monitor is turned on for Setup and Memory Review • Test strip is inserted into the monitor 	No action required. If all segments are not displayed on monitor, call BD toll-free, 24 hours a day, 7 days a week, at 1.888.BDCARES 1.888.232.2737.*
	The monitor is not coded.	Code your monitor. Refer to page 12 for coding your blood glucose monitor.
	This is an example of a code number stored in your monitor.	Match the code number that appears on the display with the code on the vial of test strips that you are using.

* NOT FOR EMERGENCY OR MEDICAL INFORMATION.

DISPLAY	WHAT IT MEANS	WHAT TO DO
	Monitor is ready to accept a blood sample.	Apply a blood sample to the test strip. Refer to page 21 for how to test your blood glucose.
	5-second countdown as monitor calculates the blood glucose test result.	No action required.
	A blood glucose test result in mmol/L.	Record the result in your logbook.
	Your blood glucose reading is higher than 33.3 mmol/L. You may have high blood sugar.	Retest your blood glucose immediately. If your reading is still "HI," you should treat as prescribed by your healthcare professional and/or contact your healthcare professional immediately.
	Your blood glucose reading is lower than 1.1 mmol/L. You may have low blood sugar.	Retest your blood glucose immediately. If your reading is still "LO," you should treat as prescribed by your healthcare professional and/or contact your healthcare professional immediately.

DISPLAY	WHAT IT MEANS	WHAT TO DO
	A blood glucose test result in mmol/L stored in the monitor's memory.	No action required.
	Battery is getting low but you can still perform a test. Battery will appear on the display when reviewing different screens. Display shown is an example of one type of screen.	We suggest that you replace the battery immediately. There is only enough power to perform approximately 50 tests. Refer to page 60 for replacing your battery.
	End of Setup or Memory Review.	No action required.
	An insulin dose record in the monitor's memory. Display shows an example of 8 units of insulin.	No action required.
	An insulin type record in the monitor's memory. Display shows an example of P1 that refers to the insulin type as labeled by the user.	No action required.

DISPLAY	WHAT IT MEANS	WHAT TO DO
	The average of all blood glucose test results taken in the last 7 days.	No action required.
	The average of all blood glucose test results taken in the last 14 days.	No action required.
	Memory is empty. There are no blood glucose test results in the monitor's memory. Averages cannot be calculated.	No action required.
	The average of 3 most recent blood glucose test results taken during the first Time-Specific time period (A1). A similar display will appear for A2, A3, and A4.	No action required.
	One of the 3 individual blood glucose test results that make up a Time-Specific Average. Example shows most recent of the 3 test results.	No action required.

DISPLAY	WHAT IT MEANS	WHAT TO DO
	A control solution test result.	No action required.
	A marked blood glucose test result.	No action required.
	A marked insulin dose.	No action required.
	System Error.	Call BD toll-free, 24 hours a day, 7 days a week, at 1.888.BDCARES (1.888.232.2737).*
	System Error.	Call BD toll-free, 24 hours a day, 7 days a week, at 1.888.BDCARES (1.888.232.2737).*
	Temperature Error.	Monitor is outside the required temperature range of 15°C - 39°C (59°F - 102°F). Move the monitor to a warmer or cooler area.

* NOT FOR EMERGENCY OR MEDICAL INFORMATION.

DISPLAY



WHAT IT MEANS

Incorrect application of blood sample or control solution onto the test strip. Test strip may be damaged.

WHAT TO DO

Insert a new test strip and perform the test again.

Monitor does not begin test countdown after applying a blood sample.

- Not enough blood sample.
- Test strip may be damaged.
- Sample applied after monitor automatically turned off.
- Monitor may not be working properly.

Repeat the test with a new test strip.

Repeat the test with a new test strip.

Repeat the test with a new test strip.

Call BD toll-free, 24 hours a day, 7 days a week, at 1.888.BDCARES (1.888.232.2737).*

Monitor does not turn on after inserting a test strip.

- Battery is dead.
- Battery is installed incorrectly or there is no battery in the monitor.
- Test strip is inserted upside down or incompletely.
- Monitor may not be working properly.

Replace the battery. Check that the battery is correctly installed with the “+” sign facing you.

Insert the test strip correctly with the “BD” name facing up and the correct end inserted into the test strip slot.

Call BD toll-free, 24 hours a day, 7 days a week, at 1.888.BDCARES (1.888.232.2737).*

Caring for Your Monitor

►STORING AND CLEANING

- Keep your BD Logic™ Blood Glucose Monitor clean and protect it from extremes in temperature. Do not store your monitor in the car or in the refrigerator.
- No cleaning is required. If necessary, clean the outside of the monitor with a clean cloth dampened with water.

►BATTERY

Your BD Logic™ Blood Glucose Monitor comes with one installed 2450 3-volt coin cell battery or equivalent. It is important to replace the battery immediately when the battery is low.

(Continued on next page.)



* NOT FOR EMERGENCY OR MEDICAL INFORMATION.

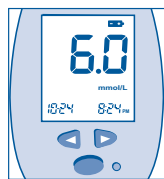
* NOT FOR EMERGENCY OR MEDICAL INFORMATION.

The monitor will tell you the battery is low by displaying  when the monitor is turned on.

- You can still get accurate test results or review your memory functions. However, when the symbol first appears, there is only enough power to perform approximately 50 tests.
- When the battery runs out, the monitor will not turn on. The test result and insulin injection information you have stored in memory will not be lost, however, if the battery is removed from the monitor, you may need to reset the date and time.
- Battery life varies depending on how often you use your monitor. On average, the battery should last for 1 year.

How to Replace the Battery

1. The monitor display shows  when performing a test or reviewing your memory functions.
2. Turn the monitor off by pressing and holding the **Mode**  button, OR the monitor will turn off automatically after 1 minute.
3. Turn the monitor around so that the display is facing away from you.



Low Battery



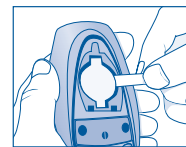
Turn Monitor Around

4. Open the battery door by pushing back on the opener and lifting up as shown.



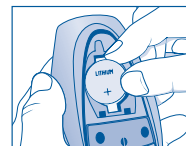
Open Battery Door

5. Remove old battery by pulling on the tab.



Remove Old Battery

6. Put in a new battery with the “+” side facing up and the tab showing as illustrated in step 5.



Put in New Battery

7. Replace battery door as shown.



Replace Battery Door

NOTE: After replacing the battery, reset the time and date to match the local time. (Refer to page 9 for how to set the time and date.) Follow your local regulations on battery disposal.

Healthcare Precautions and Limitations

- Severe dehydration and excessive water loss may cause false low results. If you think you may be dehydrated, consult your healthcare professional immediately.
- Test results greater than 13.3 mmol/L may mean high blood sugar (hyperglycemia). Test results lower than 3.3 mmol/L may mean low blood sugar (hypoglycemia). If you get results in these ranges, retest your blood glucose. If your reading is still in these ranges, you should treat as prescribed by your healthcare professional and/or contact your healthcare professional immediately.
- If your blood glucose test results do not match the way you feel AND you have followed all of the instructions described in your Owner's Guide, contact your healthcare professional.

Conditions That May Affect Results

- Elevated levels of acetaminophen, tolazamide, uric acid, bilirubin, ephedrine, and methyldopa may affect results.
- Sodium heparin may be used. EDTA is not recommended for use with the BD Logic™ Blood Glucose Monitor.

3-Year Warranty

- Becton Dickinson Canada Inc. guarantees the BD Logic™ Blood Glucose Monitor will operate as described in this Owner's Guide for a period of 3 years from the date of purchase when used and maintained in accordance with the instructions or BD will replace it. Battery life and defect or damage due to misuse or abuse are excluded from this warranty. This warranty extends only to the original purchaser and is not transferable.
- If, within 60 days of original purchase, you are not completely satisfied with your BD Logic™ Blood Glucose Monitor, you may return it for a full refund. Your BD Logic™ Blood Glucose Monitor must be accompanied by an original receipt, indicating the date of purchase. This guarantee extends only to the original purchaser and is not transferable.

Specifications

Test	Capillary blood glucose referenced to plasma
Assay Method	Glucose oxidase biosensor
Test Result Range	1.1 mmol/L to 33.3 mmol/L
Test Time	5 seconds
Test Strip Volume	0.3* µL
Power Source	One replaceable 2450 3-volt coin cell battery or equivalent
Battery Life	1460 tests or about 1 year at 4 tests per day
Glucose Units	mmol/L
Display	LCD
Memory	Up to 250 Blood Glucose and Control Solution Tests Up to 250 Insulin Records
Functions	<ul style="list-style-type: none"> • Averaging: 7-Day, 14-Day, and 4 Time-Specific Averages • Insulin Recording • Marking
Data Port	Yes
Automatic Shutoff	One (1) minute after last user action**
Size	91.4 mm x 58.4 mm x 22.9 mm (3.6" x 2.3" x 0.9")
Weight	75 g (2.65 ounces) (with battery)
Operating Ranges:	
Altitude	Up to 3,000 meters (10,000 ft)
Temperature	15°C to 39°C (59°F to 102°F)
Humidity	10% to 90% relative humidity
Hematocrit	25% to 60
Type of Protection	Class II
Protection Against Ingress of Water	IPX0
Mode of Operation	Continuous

*Blood sample required 0.4 µL

**10 minutes in insulin mode or when downloading to a computer.

64 • Additional Information

How to Contact Us

BD Consumer Services is available to help you 24 hours a day, 7 days a week. If you have any comments or questions about your BD Logic™ Blood Glucose Monitor, call BD Consumer Services toll-free, in Canada at 1.888.BDCARES (1.888.232.2737).*

Please have your BD Logic™ Blood Glucose Monitor and the following information readily available when you call:

- Your monitor's Serial Number (located on the back of your monitor) _____
- Test strip information:
 - Lot Number _____
 - Code Number _____
 - Expiration Date _____
 - Control Solution Range _____
- Control Solution Information:
 - Lot Number _____
 - Expiration Date _____

* NOT FOR EMERGENCY OR MEDICAL INFORMATION.

Additional Information • 65

