



ACON Laboratories, Inc. San Diego, CA 92121, USA Customer Support 1-800-838-9502 www.oncallmeters.com

For in vitro diagnostic use only.

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# -On Call Vivid

# **Blood Glucose Monitoring System**

Self monitoring of blood glucose (SMBG) is an important part of diabetes care. But the high cost of testing can make this impossible. At **ACON**, our goal is to provide high quality glucose monitoring systems at a price that allows you to test as often as necessary. Together, we can better manage your diabetes and help you live a longer and healthier life.

Welcome, and thank you for choosing the *On Call* Vivid Blood Glucose Monitoring System. The *On Call* Vivid Blood Glucose Monitoring System will give you accurate blood glucose results in just a few simple steps.

The On Call® Vivid Blood Glucose Monitoring System is an electrochemical enzymatic assay. It is for the quantitative detection of glucose in fresh capillary whole blood. It allows diabetics to take blood samples from the fingertip, forearm, or palm. It is used at home as a way to monitor the effectiveness of diabetes control programs. Alternate testing sites (forearm and palm) should be used only during steady-state times (when blood glucose level is not changing rapidly). The On Call® Vivid Blood Glucose Monitoring System is intended to be used by a single patient and should not be shared. Alternative site testing (AST) should not be used to calibrate continuous glucose monitors (CGMs) nor for use in insulin dose calculations. On Call® Vivid Blood Glucose Monitoring System is for single patient use only. Do not share with others.

To ensure accurate results from your *On Call® Vivid* Blood Glucose Monitoring System, please follow these guidelines:

- Read instructions before use.
- Use only On Call<sup>®</sup> Vivid Blood Glucose Test Strips with the On Call<sup>®</sup> Vivid Blood Glucose Meter.
- For in vitro diagnostic use only. Your blood glucose monitoring system is to be
  used only outside the body. It's for monitoring the effectiveness of diabetes
  control. It should not be used for the diagnosis of diabetes.
- For self testing use only.
- Test only whole blood samples with the On Call<sup>®</sup> Vivid Blood Glucose Test Strips and meter.
- For self-testers, consult your physician or doctor before making any adjustments to your medication, diet or activity routines.
- Keep out of reach of children.
- Not for use on critically ill patients, patients in shock, dehydrated patients or hyper-osmolar patients.

Following the instructions outlined in this User's Manual. You will be able to use your *On Call® Vivid* Blood Glucose Monitoring System to monitor your blood glucose and better manage your diabetes.

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# **Getting Started**

Before testing, read the instructions carefully. Learn about all the components of your *On Call® Vivid* Blood Glucose Monitoring System. Depending on the *On Call® Vivid* product you purchased, you may need to buy some accessories separately. Please check the list of contents on the outer box for details on which components are included with your purchase.



**Blood Glucose Meter** 



**Lancing Device** 



Sterile Lancet



Test Strips



Clear Cap



**Control Solution** 



**Carrying Case** 

# **Component Descriptions**

- Blood Glucose Meter: Reads the test strips and displays the blood glucose level.
- Test Strips: Equipped with a chemical reagent system. They measure glucose concentration in blood when inserted into the meter.
- Lancing Device: Used with sterile lancets to prick the fingertip, palm (at the base of the thumb) or forearm for blood sample collection. The packaged lancing device has multiple depth settings. Allows users to adjust the depth of the puncture to minimize discomfort. It can also eject the used lancets.
- Clear Cap: Used with the lancing device and sterile lancet to draw a blood sample from the forearm or palm.
- Sterile Lancets: Used with the lancing device to draw a blood sample. Sterile lancets are inserted into the lancing device with each blood sample taken. Discard after use.
- 6. Control Solution: Confirms that the blood glucose monitoring system is properly working. Use this solution in place of a blood sample to check the test strips and meter for a pre-calibrated reading. Control Solution 1 is all you need most of the time. Control Solution 2 is also available if you want to do a level 2 test. The two levels of control solution are available in the On Call® Vivid Glucose Control Solution package. This package is sold separately.
- Carrying Case: Makes this blood glucose testing system easy to carry anywhere.
- User's Manual: Provides detailed instructions on using the blood glucose monitoring system.
- Quick Reference Guide: Provides a brief overview of the blood glucose monitoring system and testing procedures. This small guide can be kept in your carrying case.
- Logbook: Allows users to record their blood glucose data. Used to identify any trends.
- 11. Warranty Card: Should be completed and returned to the Warranty Center. Qualifies your meter for the 5-year warranty.

#### Note:

- The meter and lancing device are for single patient use. Do not share them with anyone!
- All parts of the kit are considered biohazardous. They can potentially transmit infectious diseases, even after you have performed cleaning and disinfection. Please follow proper precautions when handling your meter and lancing

device.

3. Cross-use of meter and lancing device may cause Bloodborne Pathogens Transmission. For more information, please refer to the FDA Public Health Notification: "Use of Fingerstick Devices on More than One Person Poses Risk for Transmitting Bloodborne Pathogens: Initial Communication" (2010) at <a href="http://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/ucm224025.htm">http://www.fda.gov/MedicalDevices/Safety/AlertsandNotices/ucm224025.htm</a>. You may also refer to the CDC Clinical Reminder: "Use of Fingerstick Devices on More than One Person Poses Risk for Transmitting Bloodborne Pathogens" (2010) at <a href="http://www.cdc.gov/injectionsafety/Fingerstick-DevicesBGM.html">http://www.cdc.gov/injectionsafety/Fingerstick-DevicesBGM.html</a>.

# On Call® Vivid Blood Glucose Meter

The meter reads the test strips and displays the blood glucose concentration. Use these diagrams to become familiar with all the parts of your meter.



Liquid Crystal Display (LCD): Shows your test results. Helps you through the testing process.

**M Button:** Recalls previous test results from the meter memory. Performs other menu selection functions.

**S Button:** Selects meter settings and performs other menu selection functions.

**Strip Port:** Test strips are inserted into this area to perform a test.

**Power Button:** Used to manually turn the meter **on** or **off**, check the display to confirm that all the display segments are turned on, and check the date/time. Turn **on** or **off** display backlight and strip port light.

Strip Ejector: Slide the ejector forward to discard the used test strip.

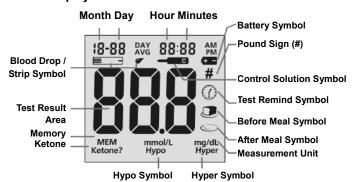
**Note:** Dispose of blood samples and materials carefully. Treat all blood samples as if they are infectious materials. Follow proper precautions. Obey all local regulations when disposing of blood samples and materials.

Battery Cover: Remove the battery cover to install two CR2032 coin cell batteries.

Battery Cover Tab: Press the battery cover tab to open battery cover.

**Data Port:** Sends information to a computer via an optional data transfer cable. Allows you to view, analyze and print stored data in the meter. The data transfer cable is available for order as an optional add-on.

### **Meter Display**



Battery Symbol: Warns when you should replace the battery.

**Blood Drop / Strip Symbol:** Wait for the Blood Drop / Strip Symbol to appear before applying the sample. These two symbols appear at the same time.

**Pound Sign (#):** Appears with the control solution test result or when you mark an invalid result to prevent it from being included in the average.

**Control Solution Symbol:** Indicates a control test result. A pound sign (#) will also be displayed when control solution symbol appears.

Test Result Area: Indicates test result.

**Measurement Unit:** Only one unit will be displayed on your meter. It cannot be adjusted.

**Hyper Symbol:** Appears when the blood glucose concentration is above the target "Hyperglycemia" (high blood sugar) level that you have set.

**Hypo Symbol:** Appears when the blood glucose concentration is below the "Hypoglycemia" (low blood sugar) target level that you have set.

**Ketone:** Appears when the blood glucose concentration is above 300 mg/dL. This simply suggests that a ketone test is recommended. Consult your doctor about testing for ketones.

**Note:** This symbol does not mean that the system has detected ketones. It recommends that a ketone test should be taken.

Memory: Shows a test result stored in memory.

**Test Remind Symbol:** Appears to remind you to test your blood glucose.

Before Meal Symbol: Appears when before-meal test results are displayed.

After Meal Symbol: Appears when after-meal test results are displayed.

#### Meter Use and Precautions

- Wait for the Blood Drop / Strip Symbol to appear before applying the sample.
- The meter is preset to display blood glucose concentration in either millimoles
  per liter (mmol/L) or milligrams per deciliter (mg/dL). This depends on your
  country's standard unit of measurement. This unit of measure cannot be
  adjusted. The meter will be set to mg/dL by default when sold in the United
  States.
- Meter will shut off by itself after 2 minutes of inactivity.
- Do not get water or other liquids inside the meter.
- Keep the strip port area clean.
- Keep your meter dry. Avoid exposing it to extreme temperatures or humidity.
   Do not leave it in your car.
- Do not drop the meter or get it wet. If you do, check the meter by running a
  quality control test. Refer to Quality Control Test on page 18 for instructions.
- Do not take the meter apart. This will void the warranty.
- Refer to the Caring for Your Meter section on page 36 for details on cleaning the meter.
- Keep the meter and all associated parts out of reach of children.

**Note:** Follow proper precautions and all local regulations when disposing of the meter and used batteries.

### All Glucose Systems Preventive Warnings with Regard to EMC:

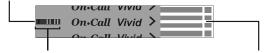
- This instrument is tested for immunity to electrostatic discharge as specified in IEC 61000-4-2. Use of this instrument in a dry environment, especially if synthetic materials are present (synthetic clothing, carpets, etc.) may cause damaging static discharges that may cause erroneous results.
- This instrument complies with the emission and immunity requirements. The
  requirements are described in EN61326-1 and EN61326-2-6. Do not use this
  instrument in close proximity to sources of strong electromagnetic radiation.
  These may interfere with proper operation of the meter.

# On Call® Vivid Blood Glucose Test Strips

The On Call® Vivid Blood Glucose Test Strips are thin strips. The strips have a chemical reagent system. They work with the On Call® Vivid Blood Glucose Meter to measure the glucose concentration in whole blood. After the strip is inserted into the meter, blood is applied to the sample tip of the test strip. The blood is then absorbed into the reaction cell where the reaction takes place. A transient electrical current is formed during the reaction. The blood glucose concentration is calculated based on the electrical current detected by the meter. The result is shown on the meter display. The meter is set to display plasma equivalent results.

#### Sample Tip

Apply blood or control solution here



#### **Check Window**

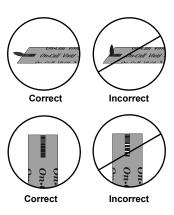
Check to confirm that a sufficient sample has been applied

#### Contact Bars

Insert this end of the test strip into the meter until it stops

**IMPORTANT:** Apply the sample only to the sample tip of the test strip. Do not apply blood or control solution to the top of the test strip. This may result in an inaccurate reading.

Hold the blood drop to the sample tip of the test strip until the check window is completely full. The meter will then begin to count down. If you applied blood but do not see the countdown start, you may reapply a second drop of blood within 3 seconds. If the check window does not fill and the meter starts to count down, then do not add more blood to the test strip. If you do then you may get an E-5 message or an inaccurate test result. In this case, if the meter begins to count down and the check window does not fill, discard the strip and begin the test again with a new test strip.



#### Storage and Handling

Please review the following storage and handling instructions:

- Store test strips in a cool, dry place. Store them at 41-86°F (5-30°C). Store test strips away from heat and direct sunlight.
- · Do not freeze or refrigerate.
- Do not store or use test strips in a humid place, such as a bathroom.
- Do not store the meter, the test strips or control solution near bleach or cleaners that contain bleach.
- The test strip should be used immediately after removing it from the container.
- Repeated insertion and removal of a test strip into the meter strip port may result in reading errors.
- Do not use your test strips past the unopened expiration date. The unopened expiration date is printed on the label. This may produce incorrect test results.
   Note: The expiration date is printed in Year-Month-Date format. 2018-01-30 means January 30<sup>th</sup>, 2018.

### Special Instructions for Test Strips in the Vial

- Test strips must be stored in the original vial with the cap tightly closed; this
  keeps them in good working condition.
- Do not transfer test strips to a new vial or any other container.
- Replace the cap on the test strip vial immediately after removing a test strip.
- A new vial of test strips may be used for 6 months after being first opened.
   Write the opened expiration date on the vial label after opening. Discard the vial 6 months after you first open it. Usage after this period may result in inaccurate readings.

### Special Instructions for Test Strips in the Foil Pouch

- Tear the pouch carefully starting from the tear gap. Avoid damaging or bending the test strip.
- Use the test strip immediately after removing it from the pouch.

### **Test Strips Precautions**

- For in vitro diagnostic use. Test strips are to be used only outside the body for testing purposes.
- Do not use test strips that are torn, bent, or damaged in any way. Do not reuse

test strips.

- Keep the test strips vial or the foil pouch away from children and animals.
- Consult your doctor before making any changes in your treatment plan based on your blood glucose test results.
- Not intended for the diagnosis of, or screening for, diabetes mellitus.
- Not for use on neonates.
- When testing alternative sites, consider testing before eating, before taking medication, before exercising, or 2 hours after eating.

See the test strips insert for more details.

# On Call® Vivid Glucose Control Solution

The On Call® Vivid Glucose Control Solution contains a known concentration of glucose. It is used to confirm that your On Call® Vivid Blood Glucose Meter and test strips are working together properly. It also confirms that you are performing the test correctly. It is important to run a quality control test regularly to make sure you are getting correct results.

You should run a quality control test:

- Before you first use your meter, to familiarize yourself with its operation.
- Before using a new box of test strips.
- When you suspect that the meter or test strips are not working properly.
- When you suspect that your test results are inaccurate, or if they are inconsistent with how you feel.
- When you suspect that your meter is damaged.
- After cleaning your meter.
- At least once a week.

Refer to Quality Control Test on page 18 for instructions on running a quality control test.



#### Storage and Handling

Please review the following storage and handling instructions:

- Store the control solution at 36-86°F (2-30°C).
- Do not refrigerate or freeze.
- If the control solution is cold, do not use until it has warmed to room temperature.
- Use before the unopened expiration date that is shown on the bottle.
   Note: The expiration date is printed in Year-Month-Date format. 2018-01-30 means January 30<sup>th</sup>, 2018.
- Each bottle of control solution can be used for 6 months after you first open it.
   Record the opened and the resulting expiration date on the bottle label.

#### Control Solution Precautions

- For in vitro diagnostic use. The control solution is for testing only outside the body. Do not swallow or inject.
- Shake well before using.
- Control solution tests are specified to be accurate only when tested between 50 and 104°F (10-40°C).
- The control ranges shown on the test strip vial (or on the foil pouch) are not recommended ranges for your blood glucose level. Your personal blood glucose target ranges should be determined by your doctor.
- Do not touch the test strip with the tip of the control solution bottle.
- Use only the same brand of control solution that was provided with your kit.

Please contact Customer Support at 1-800-838-9502 to obtain more control solution materials. See the control solution package insert for more details.

# **Installing the Battery**

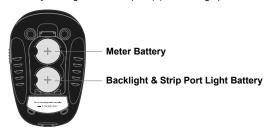
If the batteries have been preinstalled in the meter, a plastic tab will be protruding from the battery. Simply pull on the tab to remove the plastic strip.

Batteries may not be preinstalled in the meter. The meter requires two CR 2032 3.0V coin cell batteries. Please find the batteries in your carrying case and install them according to the following steps:

 Turn over the meter to locate the battery cover. Press the battery cover tab on the top and lift the cover to open it.



Insert two new CR 2032 3.0V coin cell batteries on top of the plastic tape. Make sure they are aligned with the plus (+) side facing up.



3. Close the battery cover until it snaps shut.

# Meter Setup Before Testing

Before using your meter for the first time, you will need to adjust the settings that are listed in detail below.

- Meter Setup Mode: Press the S button for 2 seconds to enter the meter setup mode. The meter will automatically enter the setup mode when turned on for the first time.
- 2. Clock: Set the clock to 12 or 24 hour mode. Press the M or S button to switch between the two settings. Then press the Power button to save your choice. Now you can start to set the year, month and date.

**Note:** The clock needs to be reset after replacing the battery.



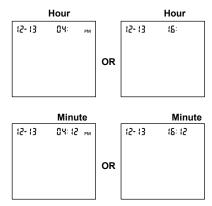


3. Date: The year will appear at the top of the display. Press the M or S button to increase or decrease the year. Once you have selected the correct year, press the Power button to save your choice. Then you can start to set the month. Press the M or S button to increase or decrease the month. Then press the Power button to save your choice. You can now start to set the date. Press the M or S button to increase or decrease the date. Then press the Power button to save your choice. Then you can start to set the time.

Year	Year Month		Date			
50 15	15-	50 15		(2- (3	50 15	

4. **Time:** The hour will appear at the top of the display. Press the M or S button to change to the correct hour. Press the Power button to save your choice and set the minutes. Press the M or S button to change to the correct minute. Press

the Power button to save your choice. You can then start to set the meal marker feature



5. Meal Marker: The meter comes with the meal marker feature disabled. The meter allows the user to enable or disable this option. The words "On" or "Off" will be displayed on the large center segment of the display. The before meal symbol together with the after meal symbol will be displayed as shown below.





Press the M or S button to switch between turning the meal marker "On" and "Off". Press the Power button to confirm your selection.

6. Audio Feature: The meter comes with the audio feature enabled. There will be a short beep when it is turned on, after sample detection and when the result is ready. The meter will sound three short beeps to sound a warning when an error has occurred. Please check the error number on the display to determine what kind of error has occurred.





Press the M or S button to turn the meter beep "On" or "Off". Press the Power button to confirm your selection.

7. Ketone Indicator: The meter comes with the Ketone indicator feature disabled. Press the M or S button to turn the Ketone indicator "On" or "Off". Press the Power button to confirm your selection. When the Ketone indicator is enabled, if the test result is higher than 300 mg/dL the symbol of "Ketone?" will appear on the display.



8. Hyper Indicator: The meter comes with the Hyper indicator feature disabled. Press the M or S button to turn the Hyper indicator "On" or "Off". Press the Power button to confirm your selection. When the Hyper indicator is "Off", pressing the Power button will go to the next Hypo indicator set up. When the Hyper indicator is "On", pressing the Power button will go to



the Hyper indicator level set up. At the Hyper level set up, press the M or S button to adjust the Hyper level. Press the Power button to go to the Hypo indicator set up.

**Note:** The meter allows the hyperglycemia level to be as low as 120 mg/dL or higher. The hyperglycemia level should be above the hypoglycemia level. Consult your doctor before determining what your hyper blood glucose level is.

9. Hypo Indicator: The meter comes with the Hypo indicator feature disabled. Press the M or S button to turn the Hypo indicator "On" or "Off". Press the Power button to confirm your selection. When the Hypo indicator is "Off," pressing the Power button will go to the Test Reminder set up. When the Hypo indicator is



"On", pressing the Power button will go to the Hypo indicator level set up. At the Hypo level set up, press the M or S button to adjust the Hypo level. Then press the Power button to go to the Test Reminder set up.

**Note:** The meter allows the hypoglycemia level to be as high as 100 mg/dL. The hypoglycemia level should be below the hyperglycemia level. Consult your doctor before determining what your hypo blood glucose level is.

- 10. Test Reminder: Test reminders are a useful way to remind you when to test. You can set 1 to 5 reminders per day. Your meter is preset with the test reminder disabled. You must turn it on to use this feature.
  - Press the M or S button to turn the first Test Reminder "On" or "Off". Press
    the Power button to confirm your selection. When the Test Reminder is
    "Off", pressing the Power button will go to the set up of the second Test
    Reminder. When the Test Reminder is "On", pressing the Power button will
    go to the set up of the time for the first Test Reminder. Press the M or S
    button to adjust the first Test Reminder time.

Press the Power button to confirm the first Test Reminder time and then go to the second Test Reminder set up.

- When the Test Reminder is "Off" during the second Test Reminder set up, pressing the Power button will go to the set up of the third Test Reminder. When the Test Reminder is "On", pressing the Power button will go to the set up of the time for the second Test Reminder. Press the M or S button to adjust the second Test Reminder time. Press the Power button to confirm the second Test Reminder time and then go to the third Test Reminder set up.
- Repeat the same set up procedure for Test Reminder 3, 4 and 5.
- After finishing the fifth Test Reminder set up, it will then end the setup mode and power off the meter.

If one or more test reminders have been set, the reminder symbol will always appear on the LCD screen when the meter is turned on. The display sample is shown below.

The meter beeps 5 times when it is first set. It will beep again two minutes later, and two minutes after that unless you insert a test strip or press any button. This function will still work with Audio feature turned off.

When the meter beeps at the time set by the Test Reminder feature, the date, time and strip symbol will be displayed. The Test Reminder symbol will also flash. The display sample is shown below.





**Note:** For any step of the set up, if the M or S button is pressed and held, it will allow a faster adjustment.

#### 11. Using Your Meter's Lights

Pressing the Power Button for 2 seconds will light the display's backlight or the test strip's port light. It depends on what mode your meter is in.

### Using the Test Strip Port Light and Display Backlight

- When the meter is off, press and hold the Power button for 2 seconds to turn on the meter. The meter display will first show all segments and then go into the mode of waiting for strip insertion. After the meter turns on, press and hold the Power button for 2 seconds to turn on the test strip port light. To turn off the test strip port light and turn on the meter display backlight, press and hold again the Power button for 2 seconds. To turn off the meter display backlight, press and hold the Power button for 2 seconds.
- When the meter is off, insert a test strip to turn on the meter. The meter display will first show all segments and then go into the mode of waiting for a sample application. Once the meter is ready for testing, press the Power button again for 2 seconds to turn on the test strip port light. After applying a blood sample to the test strip, and the meter detects the sample application, the test strip port light will turn itself off. If needed, press and hold the Power button for 2 seconds to turn on the meter display backlight.

#### Notes:

- If you use either the display backlight or the test strip port light during the
  test mode, the display backlight will light again to show you the test results
  after the measurement is complete.
- When the meter is not waiting for a test strip to be inserted or for a blood sample, pressing and holding the Power button for 2 seconds can only turn on the meter display backlight.
- If the test strip port light is turned on during the testing mode, the meter will turn off the test strip port light when the meter detects that a sample is applied.
- When you press and hold the Power button to turn on the meter, continue
  holding the Power button to enable the meter to show all display segments.
   When done, release the Power button. This allows you to have more time to
  examine if all display segments are displayed.

# Performing a Quality Control Test

The quality control test confirms that the test strips and meter are working together properly. It also confirms that you are performing the test correctly. It is important to perform this test:

- Before you first use your meter.
- · Before using a new box of test strips.
- · When you suspect that the meter or test strips are not working properly.
- When you suspect that your test results are inaccurate, or if they are inconsistent with how you feel.
- When you suspect your meter is damaged.
- After cleaning your meter.
- At least once a week.
- 1. Insert a test strip into the strip port, contact bars end first and facing up. It will then turn on the meter and display all the display segments. If the audio option is on, the meter will beep, signaling the meter is turned on.







NOT READY



NOT READY

- 2. Check the display to confirm that all the display segments turn on. Next, a dash will move across the display. See illustrations above.
- 3. The meter is ready for testing when the blinking blood drop and strip symbol appear. The display will show the date time and the test strip with the blood sample icon blinking to indicate that the test strip is inserted correctly. You can then add a drop of control solution.

Note: If the test strip has been inserted incorrectly, the meter will not turn on



READY TO TEST

4. Shake the control solution bottle well. Squeeze it gently and discard the first

drop. If the tip clogs, tap the tip gently on a clean, hard surface. Then shake again and use. Squeeze out a second small drop on a clean nonabsorbent surface. Touch the sample tip of the test strip to the control solution drop. If the audio option is turned on, the meter will beep. It indicates a sufficient sample has been applied.



#### Notes:

- Do not apply control solution to the test strip directly from the bottle.
- If the control solution sample does not fill the check window, do not add a second drop. Discard the test strip and start over with a new test strip.
- 5. Once a sufficient sample has been applied, the meter display will count down from 5 to 1. Then the result and a control solution symbol will be displayed on the screen. The control solution test results should be within the control range (CTRL 1). The control range (CTRL 1) is printed on the test strip vial (or on the foil pouch). This means that your blood glucose monitoring system is working properly. This also means that you are performing the procedure correctly.

Test results are displayed either in mmol/L or mg/dL depending on the unit of measure most common in your country. The meter will be set to mg/dL by default when sold in the United States.

**Note:** The control solution range is the expected range for the control solution results. It is not a recommended range for a blood glucose level.







6. Slide forward the strip ejector to discard the used test strip.

The display should also show a pound sign (#) indicating the test is a control solution test. This shows that the number will not be counted in the 7, 14, 30, 60 and 90-day averages. The pound sign (#) will also be displayed when reviewing the results stored in memory.

If the result falls outside the indicated control range:

 Confirm you are matching the correct range. Control Solution 1 results should be matched to the CTRL 1 range printed on the test strip vial (or on the foil pouch).

- Check the expiration date of the test strip and control solution. Make sure
  that the test strips vial and control solution bottle have not been opened for
  more than 6 months. Discard any test strips or control solution that has
  expired.
- Confirm the temperature in which you are testing is between 50 and 104°F (10-40°C).
- Make sure that the test strips vial and control solution bottle have been tightly capped.
- Confirm that you are using the same brand of control solution that was provided with your kit.
- Make sure that you followed the test procedure correctly.

After checking all of the conditions listed above, repeat the quality control test with a new test strip. If your results still fall outside of the control range shown on the test strip vial (or on the foil pouch), your meter may be defective. Please contact Customer Support at 1-800-838-9502.

Two levels of control solution are available labeled Control Solution 1 and Control Solution 2. Control Solution 1 is sufficient for most all self-testing needs. If you think your meter or strips may not be working correctly, you may also want to do a level 2 test. The ranges for both (CTRL 1 and CTRL 2) are displayed on the test strip vial (or on the foil pouch). Simply repeat step 4 through 6, using Control Solution 2.

To confirm your results, Control Solution 1 tests should fall within the CTRL 1 range, and Control Solution 2 tests should fall within the CTRL 2 range. If the control solution test results do not fall within their respective ranges, DO NOT use the system to test blood, as the system may not be working properly. If you cannot fix the problem, please contact Customer Support at 1-800-838-9502.

Please contact Customer Support at 1-800-838-9502 for information on ordering the *On Call® Vivid* Glucose Control Solution kit. The kit contains Control Solution 1 and Control Solution 2.

# **Testing Your Blood**

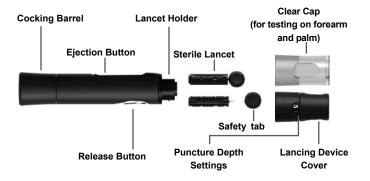
The following steps will show how to use the meter, test strips, lancing device and sterile lancets together to measure your blood glucose level.

## Step 1 - Getting a Drop of Blood

The On Call® Vivid Blood Glucose Monitoring System requires a very small drop of blood. The blood may be obtained from the fingertip, palm (at base of the thumb) or forearm. Before testing, choose a clean, dry work surface. Familiarize yourself with the procedure and make sure you have all the items needed to obtain a drop of blood.

*Important:* Prior to testing, wipe the test site with an alcohol swab or soapy water. Use warm water to increase blood flow if necessary. Then dry your hands and the test site thoroughly. Make sure there is no alcohol, soap or lotion on the test site.

**Note:** Never share lancets or the lancing device with others. Always use a new sterile lancet. Lancets are for single use only. Wash hands thoroughly with soap and water after handling the meter, the lancing device, or the test strips for testing.



#### Fingertip Testing

For fingertip sampling, adjust the depth penetration to reduce the discomfort. You do not need the clear cap for fingertip sampling.

 Unscrew the lancing device cover from the body of the lancing device. Insert a sterile lancet into the lancet holder and push it until the lancet comes to a complete stop in the lancing device.





Hold the lancet firmly in the lancet holder and twist the safety tab of the lancet until it loosens. Then pull the safety tab off the lancet. Save the safety tab for lancet disposal.



Carefully screw the cover back onto the lancing device. Avoid contact with the exposed needle. Make sure the cover is fully sealed on the lancing device.



Adjust the puncture depth by rotating the lancing device cover. There are a total of 11 puncture depth settings. To reduce discomfort, use the lowest setting that still produces an adequate drop of blood.

#### Adjustments:

- 0 1.5 for delicate skin
- 2 3.5 for normal skin
- 4 5 for calloused or thick skin

**Note:** Increased pressure of the lancing device against the finger will also increase the puncture depth.





Pull the cocking barrel back to set the lancing device. You may hear a click while the release button changes to yellow color to indicate the lancing device is now loaded and ready for obtaining a drop of blood.



6. Prior to testing, wipe your hand with an alcohol swab or wash your hands with soap. Use warm water to increase blood flow in your fingers if necessary. Then dry your hands thoroughly. Massage your hand from the wrist up to the fingertip a few times to stimulate blood flow.





7. Hold the lancing device against the side of the finger to be lanced with the cover resting on the finger. Push the release button to prick your fingertip. You should hear a click as the lancing device activates. Gently massage your finger from the base to the tip of the finger to obtain the required blood volume. Avoid smearing the drop of blood.





For the greatest reduction in pain, lance on the sides of the fingertips. Rotation of sites is recommended. Repeated punctures in the same spot can make your fingers sore and callused.

### Forearm and Palm Testing

The forearm and palm areas have less nerve endings than the fingertip. Because of this, you may find that obtaining blood from these sites is less painful than from the fingertip. The procedure for forearm and palm sampling is different. You need the clear cap to draw blood from these sites. The clear cap is not adjustable for puncture depth.

**IMPORTANT:** There are important differences among forearm, palm and fingertip samples that you should know. Important Information about forearm and palm glucose testing:

- You should consult your doctor before choosing to perform forearm or palm testing.
- When blood levels are changing rapidly, such as after a meal, insulin dose or exercise, blood from the fingertips may show these changes more rapidly than blood from other areas.
- You should use fingertips if testing is within 2 hours of a meal, insulin dose or exercise. You should also use fingertip testing any time you feel glucose levels are changing rapidly.
- You should test with the fingertips anytime there is a concern for hypoglycemia or you suffer from hypoglycemia unawareness.
- Alternative site testing (AST) should not be used to calibrate continuous glucose monitors (CGMs) nor for use in insulin dose calculations.

Please refer to Fingertip Testing to insert the lancet and load the lancing device.

1. Screw the clear cap onto the lancing device.



Choose a puncture site on the forearm or palm. Select a soft, fleshy area of the forearm or palm that is clean and dry, away from bone, and free of visible veins and hair.





To bring fresh blood to the surface of the puncture site, massage the puncture site vigorously for a few seconds until you feel it getting warm.

3. Place the lancing device against the puncture site. Press and hold the clear cap against the puncture site for a few seconds. Press the release button of the lancing device. Do not immediately lift the lancing device from the puncture site. Continue to hold the lancing device against the puncture site until you can confirm a sufficient blood sample has formed.



### Disposal of the Lancet

 Unscrew the lancing device cover. Place the safety tab of the lancet on a hard surface. Carefully insert the lancet needle into the safety tab.



Press the release button to make sure that the lancet is in the extended position. Slide the ejection button forward to discard the used lancet. Place the lancing device cover back on the lancing device.



#### Lancet Precautions

- Do not use the lancet if the safety tab is missing or loose when you take the lancet out of the bag.
- Do not use the lancet if the needle is bent.
- Use caution whenever the lancet needle is exposed.
- · Never share lancets or the lancing device with other people.
- In order to reduce the risk of infection, always use a new, sterile lancet. Do not reuse lancets.
- Avoid getting the lancing device or lancets dirty with hand lotion, oils, dirt or debris.
- For Alternative Site Testing (AST), if current lancet is not obtaining enough blood due to skin or other conditions, please contact Customer Support at 1-800-838-9502 for information on different lancet options.

### Step 2 - Testing Blood Glucose

Note: Insertion of a new test strip at any time, except while in the data transfer mode (See page 33) will cause the meter to enter the test mode.

1. Insert a test strip into the strip port, contact bars end first and facing up. This will turn on the meter and display all the display segments. If the audio option is on, the meter will beep when the meter is turned on. The display will turn on briefly with all the icons and segments turned on. Check the display to confirm that all the display segments turn on with no missing components.

The display will then show only the date and time, with a dash moving across the display. Check the display to ensure no inappropriate segments or icons are permanently turned on.







NOT READY

NOT READY

NOT READY

2. Following this display check, the system will enter the test mode. The display will show the date and time and the strip icon with the blood sample icon blinking, to indicate that the test strip is inserted correctly. If the test strip has been inserted incorrectly, the meter will not turn on. The meter is ready for testing when the blinking blood drop and strip symbol appears. At this time a blood drop can be added.



READY TO TEST

3. Touch the blood sample to the sample tip at the end of the test strip. If the audio option is turned on, the meter will also beep to indicate the sample is sufficient and the measurement has started. If you applied a drop of blood, but do not see the countdown begin, you may reapply a second drop of blood within 3 seconds.





#### DO NOT:

- Apply sample to the front or back of the test strip.
- Smear the blood drop onto the test strip.
- Press your finger against the test strip.
- 4. The meter will count down from 5 to 1 and then display the measurement results. The meter will beep to indicate that measurement is complete. Then your blood glucose level will display on the screen. The measurement unit, date, and time of the test will also be displyed.





Blood Glucose results are automatically stored in the memory. To mark invalid results and to prevent them from being included in the 7, 14, 30, 60 and 90-day averages, press the M and S buttons together. A pound sign (#) will appear on the display. This shows that the result will not be included when calculating the 7, 14, 30, 60 and 90-day averages. If a result is marked by accident, press the M or S button to unmark the result. After marking the invalid result with a pound sign (#), press the Power button to confirm the invalid result. After marking the invalid result, run the test again with a new test strip.

When the meal marker feature is turned on and a test result is displayed, mark the result as "before meal". "after meal". or invalid.

- Press the M and S buttons together to display the "before meal marker" symbol. This indicates that the result was taken before a meal.
- Press the M button again to display the "after meal marker" symbol. This
  indicates that the result was taken after a meal.
- Press the M button again to display the pound sign (#). This indicates an invalid result.
- Press the M button again then none of the above markers will be displayed for the result.

After this, press the Power button to confirm the selection as either a "before meal marker", "after meal marker", "invalid result pound sign" or none of these three symbols. If an invalid result is marked, run the test again with a new test strip.







If an error message appears on the display, refer to the **Troubleshooting Guide** on page 42. If a "HI" or "LO" error appears on the display, refer to "HI" and "LO" messages below.

- Record valid results in your logbook with the date and time, and compare them
  to the target goals set by your doctor. Refer to Suggested Testing Times and
  Target Goals on page 39 or your logbook for more details on your target blood
  glucose level goals.
- Slide forward the strip ejector to discard the used test strip.

**Note:** Dispose of blood samples and materials carefully. Treat all blood samples as if they are infectious materials. Follow proper precautions and obey all local regulations when disposing of blood samples and materials.



# "HI" and "LO" Messages

The meter can accurately measure blood glucose concentrations between 20 to 600 mg/dL. "HI" and "LO" messages indicate results outside of this range.

If "HI" appears on the display, the measured concentration value is above 600 mg/dL. The test should be retaken to ensure that no mistake was made in the procedure. If you are certain the meter is functioning properly and no mistakes were made in the procedure, and your blood glucose is still consistently measured as "HI", it indicates severe hyperglycemia (high blood glucose). You should contact your doctor immediately.



If "LO" appears on the display, the measured concentration value is below 20 mg/dL. The test should be retaken to ensure that no mistakes were made in the procedure. If you are certain the meter is functioning properly and no mistakes were made in the procedure, and your blood glucose is still consistently measured as "LO", it may indicate severe hypoglycemia (low blood glucose). You



should treat yourself for hypoglycemia immediately as recommended by your doctor.

# "Hypo" and "Hyper" Messages

If "Hypo" appears on the display, the measured concentration value is below the "Hypo" (low blood sugar) target level that you have set.



If "Hyper" appears on the display, the measured concentration value is above the "Hyper" (high blood sugar) target level that you have set.



# "Ketone?" Message

If "Ketone?" appears on the display, the measured concentration value is above 300 mg/dL. A ketone test is recommended. Consult your doctor about testing for ketones.



#### Precautions and Limitations

Please refer to test strip insert.

# **Using the Meter Memory**

The meter stores up to 500 test records. Each record includes the test result, time and date. If the memory is full, the oldest record will be erased to make room for a new one.

The meter will also calculate the average values of records from the last 7, 14, 30, 60 and 90 days.

# Viewing Stored Records

To view stored records:

 Press the M button to turn the meter on and enter memory mode. The most recent value and the word "MEM" will appear on the display.



If you are using the meter for the very first time, the meter display will show three dashed lines (- - -), the word "MEM" and the unit of measure. This shows that no data have been stored in memory.



- The date and time will be displayed together with the results stored in memory. A pound sign (#) indicates records that will be omitted from the 7, 14, 30, 60 and 90-day averages.
- Press the M or S button to view the previous or next stored records.
   Press the Power button to view the data averages. The words "DAY AVG" will appear on the screen.

Note: If you do not wish to view an average of your readings, you can press the

Power button to turn off the display. You can also press the M button to view the stored results.

- 5. While in data average mode:
  - If the meal marker feature is off, press the S button to switch between the general 7, 14, 30, 60 and 90-day averages.
  - If the meal marker feature is on, press the S button to switch between the general, pre-meal and post-meal 7, 14, 30, 60 and 90-day averages.

The meter will calculate the average that you selected. The number of records used in the DAY AVG will also appear in the display.

**Note:** Pre-meal averages only include the test results that have been marked as "before meal". Post-meal averages only include the test results that have been marked as "after meal". General 7, 14, 30, 60 and 90-day averages include all blood glucose results.



If there are fewer than 7, 14, 30, 60 and 90 days in memory, all the readings without the pound (#) sign currently stored in memory will be averaged.

If you are using the meter for the very first time, no value will appear on the display. This means that no records have been stored in memory. If you have not marked any results as "before meal" or "after meal", there will be no value for the pre-meal or post-meal averages.

Press the Power button to turn off the display. Press the M button to view the stored results.

**Note:** Results from quality control tests will not be included in the averages. When viewing results in memory, the values are marked with a pound sign (#). These values will not be included in the 7, 14, 30, 60 and 90-day averages.

## **Clearing the Memory**

Take extreme caution when clearing the memory. This is not a reversible operation. To clear the memory:

- With the meter off, press and hold the M button for two seconds. This will turn on the meter and enter the delete mode.
- To clear the memory, press and hold both the M and S buttons for two seconds.
- The display will show "MEM" and "---". After a second, the meter will clear its memory and turn itself off.
- If you want to exit the delete mode without deleting the recorded data, press the Power button. This will turn the meter off without deleting any data.



### **Transferring Records**

The meter can transfer stored information to a Windows-based personal computer (PC) using an optional data transfer cable and software package. To make use of this feature, you need the *On Call®* Diabetes Management Software and a data transfer cable from *ACON*.

- Install the software to your personal computer (PC) according to the instructions from the On Call® Diabetes Management Software Kit.
- Connect the USB cable to your PC and plug the audio jack of the cable into the meter data port. The meter will turn itself into "PC" mode.

#### Notes:

- When a new test strip is already inserted into the meter before it is connected to a PC, the meter will give an E-12 error message. The meter is waiting for a blood sample and will not switch to "PC" mode.
- When meter is in "PC" mode, it will not change to waiting for sample mode if a strip is in the meter.





- Run the On Call<sup>®</sup> Diabetes Management Software, and refer to the instructions from the software kit for how to transfer the records.
- During the data transfer, the meter will display "to" and "PC". This means the data is being transferred to the PC.



Once the data transfer is complete, the meter will display "End" and "PC".



You can then press the Power button to turn off the meter. After 2 minutes of inactivity, the meter will turn itself off.

See the package insert included with your On Call® Diabetes Management Software Kit for detailed instructions.

## Maintenance

Proper maintenance is recommended for best results.

### Replacing the Battery

Your On Call® Vivid Meter uses two 3.0 Volt CR 2032 lithium batteries. One battery (Meter Battery) powers only the meter. The other battery (Backlight & Strip Port Light Battery) powers only the meter display backlight and test strip port light.



#### Instructions:

- 1. Turn the meter off before removing the battery.
- Turn the meter over to locate the battery cover. Press the battery cover tab on the top. Lift the cover to get to the battery.
- 3. Remove and discard the old Meter Battery. Insert one new CR 2032 3.0V coin cell battery on top of plastic tape. Make sure the plus (+) side facing up.
- 4. Close the battery cover and make sure that it snaps shut.
- Recheck and reset the clock setting after battery replacement, if necessary.To set the meter clock, see Meter Setup Before Testing on page 12.

### Low backlight and strip port light battery

Replace the Backlight and Strip Port Light Battery when you notice the light dimming. The meter does not display a warning when there is a low backlight. **Note:** Having a low backlight will not affect the accuracy of the meter's results.

# Caring for Your *On Call<sup>®</sup> Vivid* Blood Glucose Monitoring System Blood Glucose Meter

#### Disinfection and Pre-Cleaning before Disinfection Process

First use DisCide Ultra Disinfecting wipes (EPA Registration No. 10492-4) to clean the entire meter surface. Wipe to remove any stains/debris. This pre-cleaning is to prepare the meter surface for a disinfection process.

Then please use another fresh DisCide Ultra Disinfecting wipe to wipe the entire meter surface. Make sure the meter surface is thoroughly damp. Please refer to the diagram of the meter in the Getting Started section for meter surface illustration. Meter surface must remain visibly wet for one full minute to effectively disinfect. After disinfection, please allow meter to air dry completely before using the meter again. When disinfecting, avoid inserting the DisCide Ultra Disinfecting wipe into inside of the strip port and data port. Please refer to the diagram for the meter in the Getting Started section for the strip port and data port location.

#### Reason to Disinfect

The disinfection process is to prevent potential spreading of infectious diseases through bloodborne pathogens. It is important to remove any stains/debris for a more effective disinfection of the meter.

Wash your hands thoroughly with soap and water after handling the meter and test strips.

### Disinfection Wipes and Where to Buy Them

The suggested wipes for your *On Call® Vivid* meter pre-cleaning and disinfection is DisCide Ultra Disinfecting Wipes (EPA Registration No. 10492-4). The active ingredients include: Isopropyl alcohol 63.25%, n-alkyl dimethyl benzyl ammonium chloride 0.12% and n-alkyl dimethyl ethyl benzyl ammonium chloride 0.12%. DisCide Ultra Disinfecting wipes are available through Palmero Health Care Company. You can purchase them by calling Palmero Health Care at 1-800-344-6424 or visiting their website at www.palmerohealth.com. DisCide Ultra Disinfecting wipes are also available at internet retailers such as www.amazon.com.

#### Disinfection and Pre-Cleaning Frequency

Be sure to disinfect your meter and lancing device at least once a week, or

whenever you feel the need to clean your meter. If someone else helps you with this test, you or your aid should disinfect your meter prior to each testing. The meter disinfection process has been validated through repeated disinfection cycles, which is equivalent to 5 years of meter usage based on once daily cleaning and disinfection processes. This is to ensure that your meter will operate properly, even with the disinfection process applied to it for 5 years.

You should always check to ensure all display segments appear when you turn the meter on. This means your meter is properly working. However, if you have any problem with your meter, please contact Customer Support at 1-800-838-9502.

**Note:** All parts of the kit are considered biohazardous. They can potentially transmit infectious diseases, even after you have performed cleaning and disinfection. Please follow proper precautions when handling your meter.

Although it has not been observed, some alterations may appear on your meter due to the cleaning and disinfection procedure. Such as: cloudy display window, plastic housing cracking, meter buttons do not function, partial display on full screen, unable to execute the meter's initial set up, etc. Stop using the meter and please contact Customer Support for help.

#### General Maintenance

Your Blood Glucose Meter is intended for single patient use. Do not share your meter with others, including family members. Always remember to pre-clean and disinfect your meter. These are important steps to prevent the potential transmission of infectious diseases.

Avoid getting liquids, dirt, blood or control solution into the meter's strip or data ports.

It is recommended that you store the meter in the carrying case after each use. On Call® Vivid Blood Glucose Meter is a precision electronic instrument. Please handle it with care.

### **Lancing Device**

Please refer to your lancing device package insert.

### Disinfection and Pre-Cleaning before Disinfection Process

Please refer to the "Disinfection and Pre-Cleaning before Disinfection Process" section for Blood Glucose Meter in the above section. The same Disinfection and Pre-Cleaning before Disinfection Process is applicable for both Blood Glucose

Meter and Lancing Device.

#### Disinfection Wipe Material and Where to Buy

Please refer to the "Disinfection Wipe Material and Where to Buy" section for Blood Glucose Meter in the above section. The same Disinfection Wipe Material and Where to Buy is applicable for both Blood Glucose Meter and Lancing Device.

#### Disinfection and Pre-Cleaning Frequency

If you run the test by yourself, you should pre-clean and disinfect your lancing device periodically, such as at minimum of once a week, or whenever you feel the need to disinfect your lancing device. If someone else assists you to run the test, the people who assist you or yourself should pre-clean and disinfect your lancing device prior to each testing. The lancing device disinfection process has been validated for 5 years of lancing device usage based on daily cleaning and disinfection processes. This is to ensure that your lancing device will operate properly, even with the disinfection process applied to it for 5 years.

However, if you have any problem with your lancing device, please contact Customer Support at 1-800-838-9502, 24 hours a day, 365 days a year.

**Note:** All parts of the kit are considered biohazardous and can potentially transmit infectious diseases, even after you have performed cleaning and disinfection. Please follow proper precautions when handling your lancing device.

Although it has not been observed for the sign of deterioration such as polymer crazing (thin silver streaks), cracking, swelling, dissolving, softening, becoming brittle, after cleaning and disinfection procedure in the manufacturer validation, you should look for any sign of deterioration on your lancing device after the cleaning and disinfection procedure.

# **Suggested Testing Times and Target Goals**

As a patient with diabetes, it is important to track your blood glucose level frequently. Your doctor will help you decide the normal target range for your glucose levels. They will also help you determine when and how often you should test your blood glucose. Some suggested times are:

- · When you wake up (fasting level)
- Before breakfast
- 1-2 hours after breakfast
- Before lunch
- 1-2 hours after lunch
- Before or after exercise
- · Before dinner
- 1-2 hours after dinner
- · Before bedtime
- After a snack
- . At 2 or 3 AM, if taking insulin

You may need to test more often whenever: 1

- You add or adjust your diabetes medication.
- You think your blood glucose levels may be too low or too high.
- You are ill, or feeling uncomfortable over long periods of time.

### Expected blood glucose levels for people without diabetes:<sup>2</sup>

Time	Range, mg/dL	Range, mmol/L
Fasting and Before Meals	70-100	3.9 – 5.6
2 hours after meals	Less than 140	Less than 7.8

Talk to your doctor to set your own daily target ranges.

Time of Day	Your Target Range	
Waking up (Fasting level)		
Before meals		
2 hours after meals		
Bedtime		
2 AM to 3 AM		
Other		

Use the logbook to record your blood glucose measurements and related information. Bring the logbook with you when you visit your doctor. Together, you can determine how well your blood glucose is being controlled. This can help you and your doctor make the best decisions about your glucose control plan.

Jennifer Mayfield and Stephen Havas, "Self-Control: A Physician's Guide to Blood Glucose Monitoring in the Management of Diabetes – An American Family Physician Monograph"

ADA Clinical Practice Recommendations, 2011. Diabetes Care, 2011, Vol.34, Supplement 1, S62-S69.

# **Comparing Meter and Laboratory Results**

Your On Call® Vivid Blood Glucose System and laboratory results both report the glucose concentration in the serum or plasma segment of your blood. However, the results may differ. This is expected. Meter results can be affected by factors and conditions that do not affect laboratory results in the same way. See On Call® Vivid Test Strip package insert for typical accuracy and precision data, and for important information on limitations. To ensure a reasonable comparison, follow these guidelines.

#### Before you go to the lab:

- · Bring your meter, test strip and control solution with you.
- Make sure your meter is clean.
- Perform a quality control test to make sure the meter is working properly.
- Comparisons will be more accurate if you do not eat for at least four hours before testing. Eight hours is preferable.

#### At the lab:

- Wash your hands before taking a blood sample.
- Take blood samples for a laboratory test and for your meter within 10 minutes of each other. This will ensure an accurate comparison of results.
- Never test blood that has been placed in test tubes containing fluoride or other anticoagulants. This will cause falsely low results.

# **Troubleshooting Guide**

The meter has built-in messages to alert you of problems. When error messages appear, note the error number. Turn off the meter and then follow these instructions.

Display	Causes	Solution
Meter fails to turn on	Battery may be damaged or not be charged.	Replace battery.
	Meter is too cold	If meter has been exposed to or stored in cold conditions, wait 30 minutes. Allow meter to reach room temperature. Then repeat test.
E-0	Power On self check error	Remove battery for 30 seconds and then put battery back in. Turn meter on again. If problem persists, please contact Customer Support at 1-800-838-9502.
E-1	Internal calibration check error	A cell phone, radio or a high power electrical source nearby can affect the meter. Increase the distance between the meter and these sources. Retest. If the problem persists, please contact Customer Support at 1-800-838-9502.
8-3	Test strip was removed during the test.	Repeat the test and ensure test strip remains in place.
E-3	Sample was applied to the test strip too soon.	Repeat test. Apply sample after blood drop/test strip icon appears.
E-4	Test strip is contaminated or used.	Repeat test with a new test strip.
	Sample was applied to the test strip too soon.	Repeat test. Apply sample after blood drop/test strip icon appears.
E-5	Insufficient sample	Repeat test. Apply enough sample to fill the test strip check window.
	Sample application error due to late sample re-dosing	Repeat test. Apply enough sample to fill the test strip check window within 3 seconds.
XI F	Temperature has exceeded the operating temperature of the system.	Move to a cooler environment. Repeat the test.

Display	Causes	Solution
LOŁ	Temperature is below the operating temperature of the system.	Move to a warmer environment. Repeat the test.
U	Battery is discharged but has enough power to run 10 more tests.	Test results will still be accurate. Replace the battery as soon as possible.
E-6 <sup>-</sup>	Battery is discharged and meter does not allow more tests until replacement with a new battery.	Replace the battery. Repeat the test.
8	Meter electronics failure	If the problem persists, contact Customer Support at 1-800-838-9502.
E-9	Improper strip type used	Damaged test strip or calibration error. Please test again by using a new strip. If problem persist, please contact Customer Support at 1-800-838-9502.
E 10	Communications failure	There is an error in transferring data to the PC. See the package insert included with the On Call® Diabetes Management Software for troubleshooting.
EII	Strip testing error	Repeat test. Apply enough blood to fill the test strip check window within 3 seconds. Do not touch the strip during meter count down. Please make sure fresh blood sample with intended hematocrit level is used. Please make sure blood sample is not contaminated. If problem persists, please contact Customer Support at 1-800-838-9502.
E 12	Meter data port is plugged in with data transfer cable when meter is in waiting for sample application mode with strip already inserted into the meter strip port.	Unplug the data transfer cable from meter data port. Then remove the strip and insert the strip to the strip port for testing. If the problem persists, please contact Customer Support at 1-800-838-9502.

For additional questions or issues with this product, please contact Customer Support at 1-800-838-9502, 24 hours a day, 365 days a year.

# Specifications

Feature	Specification
Measurement Range	20 - 600 mg/dL
Result Calibration	Plasma-equivalent. Calibrated by using YSI (Model 2300 STAT PLUS) Glucose Analyzer reference instrument, which is traceable to NIST reference standard.
Sample	Fresh capillary whole blood
Minimum Sample Size	0.8 µL
Test Time	5 seconds
On/Off Source	Two (2) CR 2032 3.0V coin cell batteries
Battery Life	1,000 tests for glucose testing (not considering data transfer). Meter display backlight and strip port light are powered by a separate battery.
Glucose Units of Measure	The meter is preset to either millimoles per liter (mmol/L) or milligrams per deciliter (mg/dL) depending on the standard of your country. The meter will be set to mg/dL by default when sold in the United States.
Memory	Up to 500 records with time and date
Automatic Shutoff	2 minutes after last action
Meter Size	89.6 mm × 58.0 mm × 21.7 mm
Display Size	37.0 mm × 33.5 mm
Weight	60.0 g (with batteries installed)
Operating Temperature	41 – 113°F (5 – 45°C)
Operating Relative Humidity	10 – 90% (non-condensing)
Hematocrit Range	20 – 70%
Data Port	9600 baud, 8 data bits, 1 stop bit, no parity

## Warranty

Please complete the warranty card that came with this product and mail it to the following address:

On Call® Vivid Warranty Center

10125 Mesa Rim Road

San Diego, CA 92121-2915, USA

If the meter fails to work for any reason other than obvious abuse within the first five (5) years from purchase, we will replace it with a new meter free of charge. For your records, also write the purchase date of your product here.

Date of purchase:

**Note:** This warranty applies only to the meter in the original purchase, and does not apply to the battery supplied with the meter.

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