Lifeloc

TECHNOLOGIES

AUTO TEST

#5

FC20

Lifeloc

Lifeloc FC20
Operations Manual

Unlock the Power of Alcohol Testing

Lifeloc FC20

Attention FC20 Operator:

Congratulations on your purchase of a Lifeloc FC20.

For over 30 years, Lifeloc Technologies has been providing advanced alcohol testing equipment & training to Law Enforcement and Corrections Professionals. We are the leader in product innovation, precision instruments, ease of use & Five Star Customer Care.

The FC20 breath alcohol tester is manufactured in Wheat Ridge, Colorado, by Lifeloc Technologies, Inc. Lifeloc offers premium quality products combined with exceptional service and technical support.

The FC20 is a state-of-the-art breath alcohol tester that is software based and incorporates unique cutting edge technologies. Because of the advanced FC design:

- Results on a positive test register within 10 seconds.
- You can take another test within 30 seconds after a positive. Repeatability is not compromised.
- Your FC20 will automatically take the test when it senses a deep lung sample is delivered.
- Your FC20 will provide an accurate test, or else explain to you why it cannot, and even provide suggestions on how to proceed to complete an accurate test on your subject.
- AA Alkaline or NiMH batteries last for about 160 "on" hours or up to 6000 tests.

Your FC20 includes many other features such as: Calibration/Calibration Check, Lock-Out Periods, Data Entry, numerous printout options, multiple test modes and optional Password Protection.

The following pages will explain in detail the operation of your FC20 portable breath tester.

Unlock the Power of Alcohol Testing

Lifeloc FC20

Front View (with Mouthpiece)

Mouthpiece

Large Graphic LCD Screen
displays functions and results

AUTO TEST

#00011

Battery Icon indicates
battery level

Mouthpiece Removal Tab

+/- Buttons set
calibration standard

Execute

Execute Button
enables you to perform
the function

Function Button
scrolls through menus
and saves changes

Function

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Power Button
turns unit on and off;
also returns you to
main testing mode

**Wrist Strap
Attachment Loop**

Lifeloc FC20

Features

- **Large Graphic LCD Display:** Capable of showing numbers, letters, icons and plain English text messages.

- **Simplified Calibration:** Automatic with EASYCAL®. Software controlled guiding you step by step manually.

- **Auto Test Mode:** The easiest way to take a test. Tester automatically takes a deep lung sample when the subject is at end of breath.

- **Manual Test Mode:** Enables the operator to control exact point of breath sample.

- **Passive Test Mode:** Checks for the presence of alcohol in the breath or in an open container, without using a mouthpiece.

- **On Board Memory:** Stores the last 4000 tests.

- **Real Time Clock:** Stores time and date information with test results as well as calibration and cal check results.

- **Printer Ready:** Print out any or all results using Lifeloc printers.

- **Two Printout Options:** Long or short.

- **Data Entry:** Capable of storing two separate data fields, one for subject and one for additional uses, operator, precinct, etc.

- **User-Selectable Test Order:** Allows choice of either Auto Test or Passive Test default mode.

- **Calibration Reminder with Lockout:** Prevents you from using an FC20 when it is due for calibration.

- **Adjustable Auto Shut-Off:** Preserves battery life.

- **Fast, Simple Operation:** While the FC20 contains a host of features, it is still easy to use.

- **Automatic Backlight:** Easy viewing of test results either day or night.

- **Exceptional Battery Life:** Up to 160 hours of operation or up to 6000 tests using four AA Alkaline or NiMH rechargeable batteries.

Lifeloc FC20

Installing Batteries

Press in and down on the battery door located on the back of the FC20.

Install the four AA Alkaline batteries in the direction of the symbols in the battery case.

Close the case by pushing up on the battery door until it locks shut.

See page 33 for directions on using rechargeable batteries.

Turning the FC On and Off
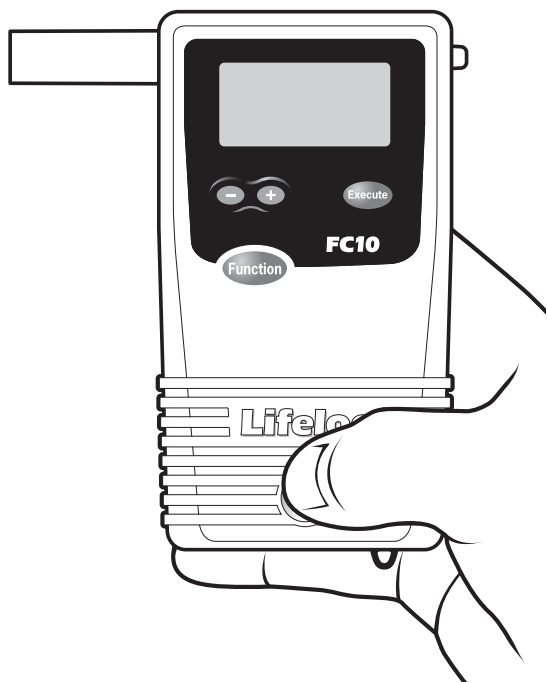
Press and hold the **Power** button on the bottom of the front of the unit until it beeps. The FC20 performs an automatic internal diagnostics check when turned on.

To turn the unit off, press and hold the **Power** button until it beeps twice. The unit will shut down.

Note: Momentarily pressing the **Power** button when the unit is on, will return you to the main menu.

Observing the Subject

The FC20 provides a highly accurate reading of breath alcohol acquired by sampling deep lung air. Readings will also detect residual mouth alcohol.

To prevent mouth alcohol from affecting a test, make certain that the subject is not allowed to put anything in their mouth for 15 minutes prior to taking a test.

If the subject just took a drink, a 15 minute observation period in which they are not permitted to put anything in their mouth should be observed before testing. This will ensure all residual alcohol from any source has completely dissipated and test results will be valid.

Attaching a Mouthpiece

Remove the mouthpiece from its wrapper, making sure not to touch the end which the subject will be blowing into.

Attach the mouthpiece to the port on the back of the FC20.

Line up the mouthpiece port over the holes in the back of the mouthpiece. Press in place.

Ensure it is securely attached.

Lifeloc FC20
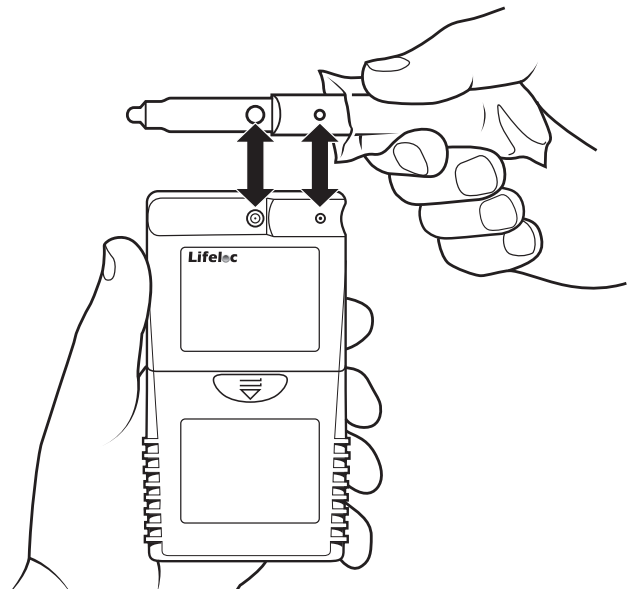
Breath Testing Modes Explained

The FC20 is capable of conducting Automatic, Manual, and Passive tests.

- **Automatic Test** is the easiest way to achieve a deep lung sample. The FC monitors the subject's breath and automatically takes the sample near the end of the breath flow.

- **Manual Test** is normally used only when the subject is unable to provide a sufficient breath sample for the automatic test.

- **Passive Test** is a quick screen to detect alcohol but is not designed to quantify the results. Passive results are reported as "POS" if alcohol is detected, "NEG" if alcohol is not detected. In this mode, no mouthpiece is required.

End of Breath and Precise Volume Explained

In Auto Test mode, the unit can be set to take a sample either:

- When the subject nears the end of the exhalation **(End of Breath)**

— or —

- When it detects 1.5L of breath **(Precise Volume)**

Both will give accurate results. Precise Volume may work better with uncooperative subjects.

(To select "END OF BREATH" or "PRECISE VOLUME" mode, see Trigger Mode instructions on p.18)

Lifeloc FC20

Auto Air Blank Explained (Optional)

If installed, this option inserts an automatic air blank function in front of Auto, Manual, and Passive tests.

An automatic air blank is a test of the ambient air. It checks to ensure that no alcohol is present, which could affect the test result.

If Auto Air Blank is enabled, the FC20 will prompt you to take a sample before testing the subject.

Auto Air Blank is normally utilized to satisfy the requirements of a specific testing protocol.

Conducting an Automatic Test

Turn the FC20 on.

Verify the display reads "AUTO TEST".

Attach the mouthpiece to the back of the unit.

Instruct the subject to blow into the mouthpiece **firmly and steadily for as long as they can**. (But not necessarily as hard as they can.) The unit calculates volume and will give an error message if the subject cannot reach 1.3 liters of breath.

Read the result.

After taking a test, the FC20 will display the results in large numbers on the display.

The result is stored in memory and available for viewing and printing at a later date.

Momentarily press the **Function** button to return to the test mode.
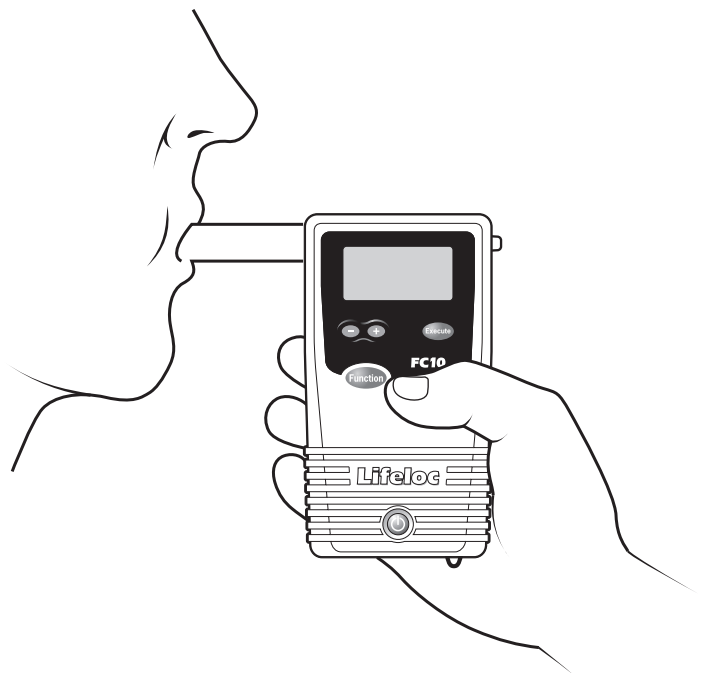
Manual Override during an Automatic Test

Note: This feature allows the completion of a test in the occasional instance when the subject may have diminished lung capacity and cannot activate the Auto Test.

Turn the FC20 on.

Attach a mouthpiece to the back of the unit and verify the display reads "AUTO TEST".

Instruct the subject to blow into the mouthpiece **firmly and steadily for as long as they can**.

When they are near the end of their breath, press the **Execute** button.

Read the result.

Conducting a Manual Test

Turn the FC20 on.

Attach the mouthpiece to the back of the unit.

Press the **Function** button until the display reads "MANUAL TEST".

Instruct subject to blow into the mouthpiece **firmly and steadily for as long as they can.**

When they are near the end of their breath, press the **Execute** button.

Read the result.

Please note, manual test mode is pressure activated. If the subject does not blow air into the mouthpiece, the test cannot be conducted.
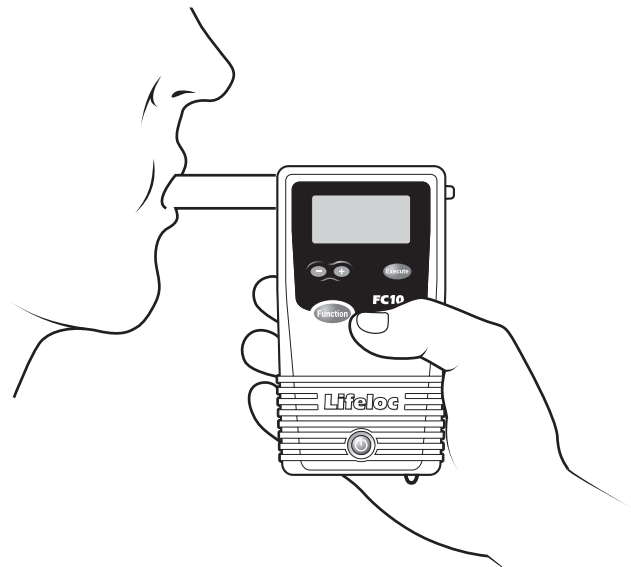
Conducting a Passive Test (No Mouthpiece)

Turn the FC20 on.

Press the **Function** button, if necessary, until the display reads "PASSIVE TEST."

Hold the FC20 sample port (orange-colored opening labeled "Port" on the back of the FC20) about 4 inches from the subject's mouth.

Have the subject blow toward the port.

Press the **Execute** button while the subject is blowing.

Read the result. The unit will only display "POS" or "NEG". It will not display the actual numerical result.

Note: A passive test can also be done over an open container to detect the presence of alcohol.
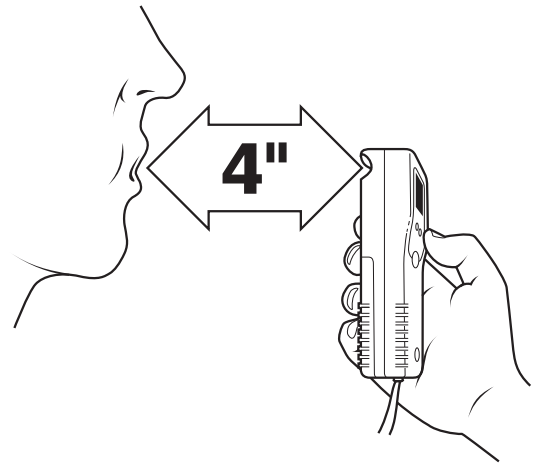
Breath Flow
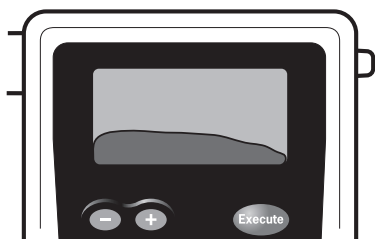
As the subject blows into the mouthpiece, the FC20 will show a graph of the breath flow on the display, as well as showing the amount of liters. Liters are shown in the upper left corner.

Alcohol Curve
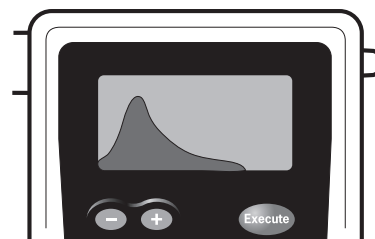
If the FC detects alcohol, the alcohol level is graphed and will be displayed before the result.

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Test Results

.080 BAC
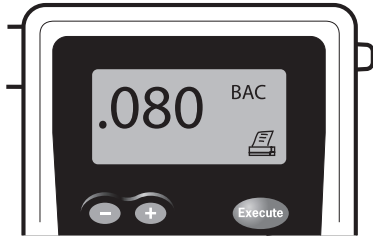
After the alcohol is graphed, the test result is displayed.

The result will remain on the screen until the **Function** or **Power** button is pressed.

The last 500 test results are retained in memory.

Removing the Mouthpiece

Remove the mouthpiece by pushing straight down on the tab at the right of the display screen. DO NOT BEND the tab.

Viewing Previous Test Results

LAST TEST RESULT
.020 BAC

Press to remove mouthpiece
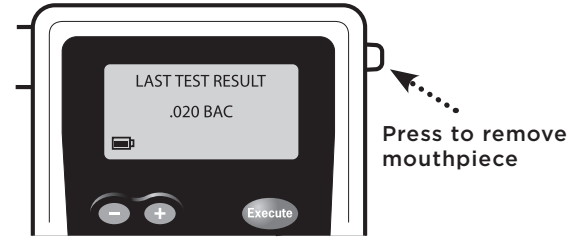
Press the **Function** button until the printer icon is displayed. The results of the last test will be displayed along with its test number at the lower left of the display.

Press the **+ or -** button to scroll between test results.

Momentarily press the **Power** button to return to the testing mode.

Printing Test Results

Printing the Current Test

Take a test. (See pages 10-12)

Plug the printer cable into the connector on the side of the FC20.

Press the **Execute** button under the printer icon to print the result.

Printing a Specific Test From Memory

Plug the printer cable into the connector on the side of the FC20.

Press the **Function** button until the printer icon is displayed.

Press the **+ or –** button to select the test number you wish to print.

Press the **Execute** button under the printer icon to print the result.

Printing All Tests Stored in Memory

Plug the printer cable into the connector on the side of the FC20.

Press the **Function** button until the printer icon is displayed.

Press the **+ or –** button to select "ALL".

Press the **Execute** button under the printer icon to print all of the test results.

Printing Calibration/Calibration Check Data

Plug the printer cable into the connector on the side of the FC20.

Press the **Function** button until the printer icon is displayed.

Press the **+ or –** button to select "CAL/CAL CHK".

Press the **Execute** button under the printer icon to print the data.

See sample printout on page 41.

Changing the Time

Press the **Function** button until the display reads "Settings".

Press the **Execute** button.

Display reads "TIME" with the hour digits flashing.

Press the **+ or –** button to change the hour.

Press the **Execute** button to save your changes and move to minutes.

Press the **+ or –** button to change the minutes.

Press the **Function** button to save your changes.

Momentarily press **Power** to return to the testing mode.

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Changing the Date

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "DATE" with the month digits flashing.

Press the **+ or –** button to change the month.

Press the **Execute** button to save the month and move to the day.

Press the **+ or –** button to change the day.

Press the **Execute** button to save the day and move to the year.

Press the **+ or –** button to change the year.

Press the **Function** button to save your changes.

Momentarily press **Power** to return to the testing mode.
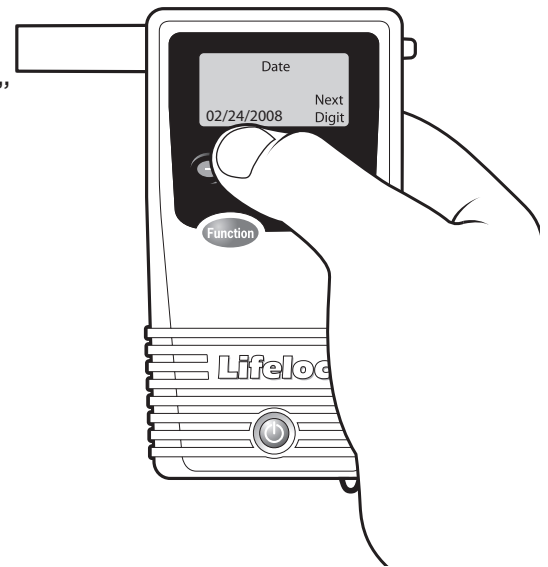
Setting the Automatic Air Blank (Optional Feature)

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "AUTO AIR BLANK".

Press the **Execute** button to turn the air blank "ON" or "OFF."

Press the **Function** button to save your changes.

Momentarily press **Power** to return to the testing mode.

Setting the Auto Shutoff Time

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "SHUTOFF TIME".

Press the **+ or -** button to adjust the shutoff time between 1-15 minutes. Disable auto shutoff by selecting "OFF".

Press the **Function** button to save your changes.

Momentarily press **Power** to return to the testing mode.

Data Entry Explained

The FC20 allows you to enter I.D. numbers and/or names that will be printed with every test result.

- Subject I.D. - Can identify a unique test subject. You will be prompted to enter name or number each time you administer a test.
- Data Field 2 - Can identify a test administrator or event. Recorded with every test until changed or disabled.
- Subject I.D. + Data Field 2 - Identifies unique test subject along with administrator or event. Data Field 2 is recorded with every test until changed or disabled. You will be prompted to enter subject name or number each time you administer a test.

Both data entry fields allow for 24 characters.

Using Data Field 2

Press the **Function** button until display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until display reads "I.D. SETTINGS".

Press the **Execute** button until display reads "DATA FIELD 2". Press the **Function** button once. The display will read "DATA FIELD 2".

Press the **+ or -** buttons to enter numbers or letters.
(Hold down to scroll quickly)

Press the **Execute** button to move to the next digit. Up to 24 characters may be entered.

Press the **Function** button to save the Data Field 2. The Data Field 2 is recorded with every test until changed or disabled.

Momentarily press **Power** to return to testing mode.

Entering a Subject I.D.

Press the **Function** button until display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until display reads "I.D. SETTINGS".

Press the **Execute** button until display reads "SUBJECT".

Press the **Function** button to save your changes.

Momentarily press the **Power** button. Display reads "SUBJECT I.D."

Press the **+ or -** buttons to enter the I.D. numbers or letters.
(Hold down to scroll quickly)

Press the **Execute** button to move to the next digit. Up to 24 characters may be entered.

Press the **Function** button to save the unique Subject I.D. with the next test.

The FC20 will now prompt you to enter a unique Subject I.D. before every test.

To bypass entering a Subject I.D., simply press the **Function** button and take a test.

You are now ready to conduct a test.

Entering a Subject I.D. + Data Fields

Press the **Function** button until display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until display reads "I.D. SETTINGS".

Press the **Execute** button until display reads "DATA FIELD 2 + SUBJECT".

Press the **Function** button once. Display reads "DATA FIELD 2".

Press the **+ or -** buttons to enter the Subject I.D. numbers or letters. (Hold down to scroll quickly)

Press the **Execute** button to move to the next digit. Up to 24 characters may be entered.

Press the **Function** button to save the Subject I.D. The Subject I.D. is recorded with every test until changed or disabled.

Momentarily press the **Power** button. Display reads "SUBJECT I.D."

Press the **+ or -** buttons to enter the I.D. numbers or letters.
(Hold down to scroll quickly)

Press the **Execute** button to move to the next digit. Up to 24 characters may be entered.

Press the **Function** button to save the unique Subject I.D. with the next test.

The FC20 will now prompt you to enter a unique Subject I.D. before every test.

To bypass entering a Subject I.D., simply press the **Function** button and take a test.

You are now ready to conduct a test.

Disabling Subject I.D. and Data Field

Press the **Function** button until display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until display reads "I.D. SETTINGS".

Press the **Execute** button until display reads "OFF."

Press the **Function** button to save your changes.

Now the FC20 will not prompt you to enter a Subject I.D. (Data Field 2 and Subject I.D. will be blank until they are enabled.)

Press the **Power** button to return to the testing mode.

Using the Keyboard (Optional Feature)

The FC20 allows for data input using an optional keyboard. If you purchase the keyboard option, you can easily input text or numbers in Subject or Data Fields or have full command of the FC20 menu.

Navigation Instructions

Space or Tab = **Function** Button

Enter = **Execute** Button

Right Arrow = **+** Button

Left Arrow = **-** Button

Escape = **Power** Button

To learn more about Lifeloc's data management solutions, please contact sales@lifeloc.com or 1.800.722.4872.

Setting Trigger Mode

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "TRIGGER MODE".

Press the **Execute** button to select between "END OF BREATH" and "PRECISE VOLUME".

Press the **Function** button to save your changes.

Momentarily press **Power** to return to the testing mode.

Security Settings Explained

Password can be set to protect access to calibration, calibration check, calibration settings and user settings.

Without a password, users are still able to conduct Automatic, Manual and Passive tests; print test results; and check battery status and temperature.

Setting Up Security Password

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "SECURITY SETTINGS".

Press the **Execute** button. The unit is now ready to accept a password. Use the **+ or -** buttons to enter a number or letter.

Use the **Execute** button to move to the next digit. Password is limited to 8 characters.

Press the **Function** button to save your password. Momentarily press **Power** to return to the testing mode.

Note: Record and store your password in a safe place. Lifeloc does not have access to your password. If password is lost, the only way to reset the unit is to call Lifeloc Tech Support at 720.317.2190.

Using Security Password

For access to Calibration, Calibration Check, Calibration Settings or User Settings.

Press the **Function** button until the display reads "CALIBRATION" or "SETTINGS". Select the one you would like to access. You are limited to one at a time.

Press the **Execute** button. Display reads "SECURITY CODE".

Enter your password using the **+ or -** buttons. Use the **Execute** button to move to the next digit.

Press the **Function** button to gain access. You now have access to all menus and settings.

Removing Security Password

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display reads "SECURITY CODE".

Enter your password using the **+ or -** buttons.

Press the **Function** button until the display reads "SECURITY SETTING".

Press the **Execute** button. Display reads "SECURITY SETTING" and shows your password in the lower left corner.

Clear your password using the **+ or -** buttons to change the letters or numbers to blank spaces. Use the **Execute** button to move to the next digit.

Press the **Function** button to clear the password.

Momentarily press **Power** to return to the testing mode.

Print Settings Explained

The FC20 settings allow you to customize your printout to your particular needs. You can choose between the following:

Number of Copies - Choose to print 1, 2 or 3 copies of a test.

Print Format - Choose to include (long format) or not to include (short format) the calibration and calibration check information with every printout. (See sample printouts on p. 41)

Printer - Select "THERMAL" or "IMPACT" to print results to your corresponding printer. Select "ALCOMARK" to download or print results to your computer.

Number of Copies Printed

Press the **Function** button until display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "PRINT SETTINGS".

Press the **Execute** button. Display reads "NUMBER OF COPIES".

Press the **+ or -** button to change the number of copies.

Press the **Function** button to save your changes.

Momentarily press **Power** to return to the testing mode.

Print Format

Press the **Function** button until display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "PRINT SETTINGS".

Press the **Execute** button. Display reads "NUMBER OF COPIES".

Press the **Function** button. Display reads "PRINT FORMAT".

Press the **Execute** button to toggle between "SHORT" and "LONG". **Long** includes Calibration and Calibration Check information on every printout; **Short** does not.

See sample printouts on page 41.

Printer Selection

Press the **Function** button until display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Execute** button. Display reads "NUMBER OF COPIES".

Press the **Function** button until the display reads "PRINTER".

Press the **Execute** button to select "THERMAL" or "IMPACT" and print to the corresponding printer; or select "ALCOMARK" and download the results to your computer.

Momentarily press **Power** to return to the testing mode.

Adjusting LCD Contrast

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "DISPLAY SETTINGS".

Press the **Execute** button. Display reads "LCD CONTRAST".

Press the **+ or -** buttons to adjust the contrast of the text.
(0 = lightest; 10 = darkest)

Press the **Function** button to save your adjustment. Momentarily press **Power** to return to testing mode.

Setting the Default Test Order

Test Order 1 (Default)	Test Order 2	Test Order 3
Auto Test Manual Test Passive Test	Passive Test Auto Test Manual Test	Auto Test Manual Test

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "DISPLAY SETTINGS".

Press the **Execute** button. Display reads "LCD CONTRAST".

Press the **Function** button. Display reads "TEST ORDER".

Press the **Execute** button to toggle between Test Order 1, 2, and 3 above.

Press the **Function** button to save the changes.

Momentarily press **Power** to return to the testing mode.

Please note: By selecting Test Order 3 you will disable passive testing.

Results Format Explained

Results for Auto and Manual tests can be displayed in a "NUMERIC" or "PASS/WARN/FAIL" (PWF) format. Passive test results, however, can only be displayed as "POS" & "NEG."

NUMERIC results are in a 3-digit BAC format.

PASS/WARN/FAIL results require setting specific levels for Pass and Fail.

For example, if Pass is set at .040 and Fail is set at .080 (default settings on your FC20), then:

Pass	=	.000 - .040
Warn	=	.041 - .079
Fail	=	.080 and above

Sample settings only. See page 23 for instructions on setting the Pass/Warn/Fail levels.
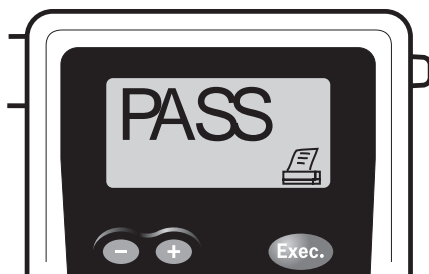
Setting Results Format

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "DISPLAY SETTINGS".

Press the **Execute** button. Display reads "LCD CONTRAST".

Press the **Function** button until the display reads "RESULTS FORMAT".

Press **Execute** to toggle between "NUMERIC" and "PWF."

Press the **Function** button to save your setting.

Momentarily press **Power** to return to the testing mode.

Setting the Pass/Warn/Fail Levels

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display reads "TIME".

Press the **Function** button until the display reads "DISPLAY SETTINGS".

Press the **Execute** button. Display reads "LCD CONTRAST".

Press the **Function** button until the display reads "PASS LEVEL".

Press the **+ or –** button to set the BAC Pass level.

Press the **Function** button. Display reads "FAIL LEVEL".

Press the **+ or –** button to set the BAC Fail level.

Press the **Function** button to save your settings.

Momentarily press **Power** to return to the testing mode.

Note: *An alcohol reading between the PASS and FAIL levels will read WARN.*

Wet Bath and Dry Gas Explained

You can calibrate and check your FC20 using either the wet bath or dry gas method. You must first set your FC20 to recognize which method or which 'Standard Type' you will be using.

Once you choose the Standard Type, the FC20 will store that information in memory and you do not have to set it again unless you change to a different method of performing a calibration/calibration check.

Dry Gas Calibration requires that, prior to calibration, you enter the Corrected Standard Value based on your altitude or elevation. Using the chart on the outside of the canister, multiply the number next to your elevation by the standard. **Please note**, if you have purchased the Baro Sensor option for your FC20, you do not need to adjust for altitude or elevation. The Baro Sensor will make the adjustment for you.

Example:

- Denver, Colorado's elevation is 5200 ft. above sea level and dry gas standard = .100 BAC.
- Correction factor from tank is .820
- Corrected Standard = .100 x .820 = .082

If you move to a significantly different altitude before calibrating, you will have to change the standard in the FC20 .

Wet Bath Calibration does not require altitude correction.

Note: The FC20 comes from the factory set for Wet Bath type and .100 BAC Calibration Standard.

Selecting the Calibration Standard

Press the **Function** button until the display reads "CALIBRATION".

Press the **Execute** button. The display reads either "WET CHECK" or "DRY CHECK".

Press the **Function** button until the display reads "CAL SETTINGS".

Press the **Execute** button. The display reads "CAL STANDARD".
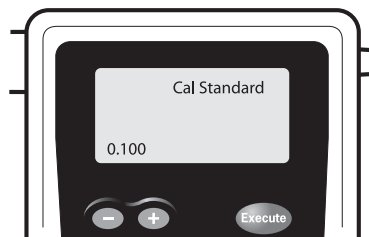
Use the **+ or –** button to change the number to the BAC level of standard you will be

calibrating to. It should be the same as on the bottle of certified solution or as your altitude corrected standard, if using a dry gas tank. (See p. 24)

Press the **Function** button to save the settings. Momentarily press **Power** to return to the testing mode.

Once you set the standard, you do not have to set it again unless you change solutions or elevation (dry gas only).

Calibration/Cal Check Explained

Calibration of an FC sets your unit to a known alcohol concentration to enable accurate BAC (Breath Alcohol Concentration) results.

You can use dry gas or wet bath solution to calibrate your FC20. Most commonly used solutions are .100, .080 or .040 BAC.

The FC20 must be between 68° and 95° F (20° - 35° C) to calibrate.

Lifeloc recommends you calibrate your FC20:

Once every 12 months, regardless of how many tests you have performed

Or, at intervals specified by your Internal Policies, Quality Assurance Plan, or State Regulations

Or, after two failed Calibration Checks

A Calibration Check simply verifies the FC20 was calibrated correctly and is within the acceptable accuracy range. *Calibration check is also referred to as "External Calibration Check," "Accuracy Check," "Verification" and "Cal Check."*

Lifeloc recommends you perform a calibration check on your FC20:

> **Once** every 30 days
>
> **Or**, at intervals specified by your Internal Policies, Quality Assurance Plan, or
>
> State Regulations

Selecting the Standard Type

Press the **Function** button until the display reads "CALIBRATION".

Press the **Execute** button. The display reads either "WET CHECK" or "DRY CHECK".

Press the **Function** button until the display reads "CAL SETTINGS".

Press the **Execute** button. The display reads "CAL STANDARD".

Press the **Function** button until the display reads "STANDARD TYPE".

Press the **Execute** button to choose between "DRY GAS" and "WET BATH".

Press the **Function** button to save settings. Momentarily press **Power** to return to the testing mode.
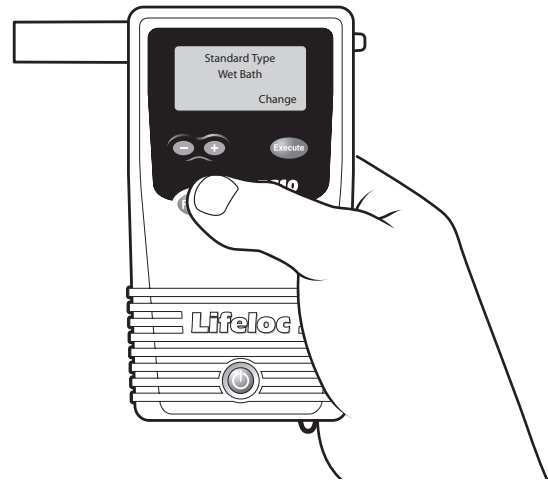
Calibration/Cal Check Lock-out Explained

The calibration/cal check lock-out allows you to prevent usage of your FC20 if it is not calibrated or cal checked in a specified time period. Time can be registered as days or number of tests.

Beginning 48 hours before the specified lock-out time, the unit will display "WARNING CAL EXPIRING", "WARNING CHECK EXPIRING" or both.

When the time period has elapsed, the unit will display "CAL EXPIRED", "CHECK EXPIRED" or both and not allow testing until it is calibrated and/or cal checked.

You can specify time periods up to 999 days or 9999 tests between calibrations or cal checks. You can also disable the calibration/cal check lock-out feature. (See below)

Setting the Calibration Lock-out Type

Press the **Function** button until the display reads "CALIBRATION".

Press the **Execute** button. Display reads either "WET CHECK" or "DRY CHECK".

Press the **Function** button until the display reads "CAL SETTINGS".

Press the **Execute** button. Display reads "CAL STANDARD".

Press the **Function** button until the display reads "CAL TIME TYPE".

Press the **Execute** button to select "DAYS" or "TESTS".

Press the **Function** button to save your setting.

Display will now read "CAL TIME" or "CAL NUM TESTS".

Press the **+ or -** button to set the number of days or tests between calibrations. The time starts counting from your last calibration date, not from the date you set it. Choosing "DISABLED" turns this setting off.

Press the **Function** button to save your setting.

Momentarily press **Power** to return to the testing mode.

Setting the Cal Check Lock-out Type

Press the **Function** button until the display reads "CALIBRATION".

Press the **Execute** button. Display reads either "WET CHECK" or "DRY CHECK".

Press the **Function** button until the display reads "CAL SETTINGS".

Press the **Execute** button. Display reads "CAL STANDARD".

Press the **Function** button until the display reads "CHECK TIME" or "CHECK NUM TESTS".

Press the **+ or -** button to set the number of days between calibration checks. The days start counting from your last calibration check date, not from the date you set it.

Press the **Function** button to save your settings.

Momentarily press **Power** to return to the testing mode.

Wet Bath Simulator Set-Up For Calibration & Calibration Check

Pour a bottle of certified alcohol solution into the simulator jar and hand tighten lid.

Connect 11-12″ long tube from input port to output port so no alcohol escapes while simulator heats up.

Plug in the simulator and turn it on.

The simulator automatically heats the solution to 34° C (93.2° F) in about 5 to 10 minutes.

Proper operating temperature is important for accuracy so be certain to check temperature before proceeding.

Performing a Wet Bath Calibration

Prepare the wet bath simulator according to its instructions on page 27.

Disconnect long tube from the output port. Attach a mouthpiece adapter securely to the output port on the simulator lid. Refer to your simulator manual for location.

Turn the FC20 on. Attach a mouthpiece to the back of the unit.

Press the **Function** button until the display reads "CALIBRATION", then press the **Execute** button. Display reads "WET CHECK".

Press the **Function** button until the display reads "WET CALIBRATE".

Calibration Pump

Simulator

Verify the "CAL STANDARD" is set to the concentration of certified alcohol solution you will be using when you calibrate. To select a new Calibration Standard, see page 24.

Slide the FC20 mouthpiece over the mouthpiece adaptor on the simulator.

Be prepared to blow into the tube for up to 10 seconds.

Start blowing

- Blow through the input tube (or use a calibration pump) to create and maintain 1/2″ of bubbles on the surface of the solution.
- Press **Execute** to proceed and start a 3 second countdown.
- When "Sample" shows after countdown, press **Execute** to take a sample.
- Continue blowing for another 3 seconds.

Stop blowing

If successful, the display will read "CAL COMPLETE."

If no alcohol is detected, display reads "INVALID CALIBRATION." Please repeat calibration setup and test, starting with wet bath simulator setup.

Disconnect the unit and wait at least two minutes before conducting a Cal Check to verify the accuracy of your calibration.

Note: Following calibration, a Cal Check is required before the unit allows you to conduct any tests.

(Calibration display flow chart is shown on p. 43)
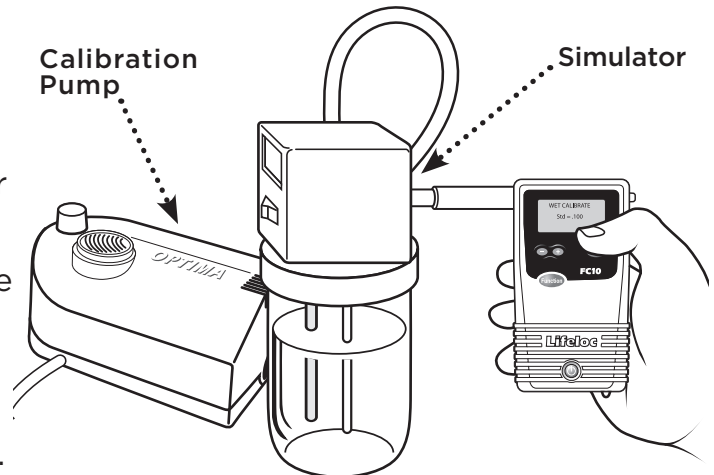
Performing a Wet Calibration Check

Prepare the wet bath simulator according to its instructions on page 27.

Disconnect long tube from the output port. Attach a mouthpiece adapter securely to the output port on the simulator lid. Refer to your simulator manual for location.

Turn the FC20 on. Attach a mouthpiece to the back of the unit.

Press the **Function** button until the display reads "CALIBRATION", then press the **Execute** button. Display reads "WET CHECK".

Verify the "CAL STANDARD" is set to the concentration of certified alcohol solution you will be using when you check the calibration. To select a new Calibration Standard, see page 24.

Slide the FC20 mouthpiece over the mouthpiece adaptor on the simulator.

Be prepared to blow into the tube for up to 10 seconds.

Start blowing

- Blow through the input tube (or use a calibration pump) to create and maintain 1/2" of bubbles on the surface of the solution.

- Press **Execute** to proceed and start a 3 second countdown.

- When "SAMPLE" appears press **Execute** to take a sample.

- Continue blowing for another 3 seconds.

Stop blowing

Read the result. It should be within +/- .005 BAC of the standard used. If your solution is greater than .100 BAC, accurate results will be within +/- 5%.

Example:

- A .100 BAC solution should read between .095 and .105 BAC.

- A .200 BAC solution should read between .190 and .210 BAC.

If no alcohol was detected, the display will read "INVALID CHECK". Repeat wet bath calibration check instructions.

Dry Gas Tank Set-Up

Attach the regulator to the dry gas tank.

Attach the small tube to the output port on the regulator.

Securely fit the mouthpiece adaptor to the small tube on the regulator.

Note: Do not store the dry gas tank with the regulator attached. The regulator is not designed to be the primary sealing mechanism. Leaving the regulator attached may result in a leak.
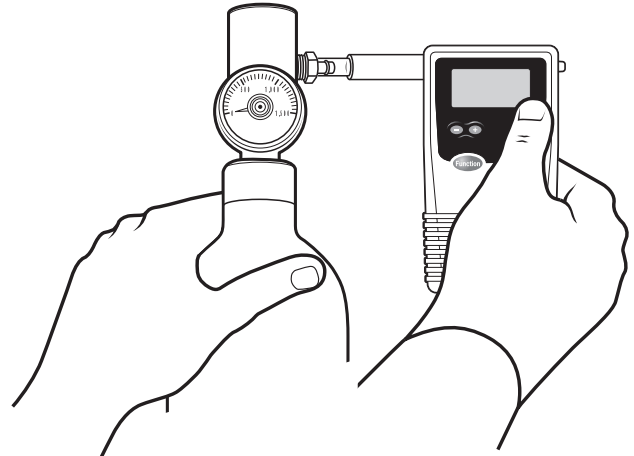
Performing a Dry Gas Calibration

Prepare the dry gas tank according to its instructions above.

Turn the FC20 on. Attach a mouthpiece to the back of the unit.

Press the **Function** button until the display reads "CALIBRATION".

Press the **Execute** button. Display reads "DRY CHECK".

Press the **Function** button until the display reads "DRY CALIBRATE".

Verify the Calibration Standard is set to the corrected BAC.

Using the Altitude Correction Factor (ACF) chart on the dry gas tank, calculate the corrected BAC.

Corrected Standard = (tank BAC) x (ACF)

To select a new Calibration Standard, see page 24.

As a reminder, if you have purchased the Baro Sensor option for your FC20, you do not need to adjust for altitude or elevation. The Baro Sensor will make the adjustment for you.

Attach the FC20 mouthpiece to the regulator by sliding it over the mouthpiece adaptor, ensuring a snug fit.

Be prepared to press the **Gas Tank Regulator** button for up to 10 seconds.

Start pressing (gas flow will start)

- Press the **Execute** button to proceed and start a 3 second countdown.

- Press the **Execute** button again to take a sample.
- Continue holding the **Regulator** button for another 3 seconds.

Stop pressing (gas flow will stop)

If successful, the display will read "CAL COMPLETE".

If no alcohol is detected, display reads "INVALID CALIBRATION" Please check gas level on your tank regulator and replace tank if empty. Repeat dry gas calibration instructions on page 30.

Disconnect the FC20 and wait at least two minutes before conducting a Cal Check.

Note: Following calibration, a Cal Check is required before the unit allows you to conduct any tests.

(Calibration display flow chart is shown on p. 43)

Performing a Dry Gas Calibration Check

Prepare the dry gas tank according to its instructions on page 30.

Turn the FC20 on. Attach a mouthpiece to the back of the unit.

Press the **Function** button until display reads "CALIBRATION".

Press the **Execute** button. Display reads "DRY CHECK".

Verify the Calibration Standard is set to the corrected BAC.

Using the Altitude Correction Factor (ACF) chart on the dry gas tank, calculate the corrected BAC.

Corrected BAC = (tank BAC) x (ACF)

To select a new Calibration Standard, see page 24.

As a reminder, if you have purchased the Baro Sensor option for your FC20, you do not need to adjust for altitude or elevation. The Baro Sensor will make the adjustment for you.

Attach the FC20 mouthpiece to the regulator by sliding it over the mouthpiece adapter, ensuring a snug fit.

Be prepared to press the **Gas Tank Regulator** button for up to 10 seconds.

Start pressing (gas flow will start)

- Press the **Execute** button on FC20 to proceed and start a 3 second countdown.

- Press the **Execute** button again to take a sample.

- Continue holding the **Regulator** button for another 3 seconds.

Stop pressing (gas flow will stop)

Read the result. It should be within +/- .005 BAC of the corrected standard used. If your solution is greater than .100 BAC, accurate results will be within +/- 5%.

Example: A .082 BAC corrected standard should read between .077 and .087 BAC.

If no alcohol is detected, display reads "INVALID CHECK". Please check gas level on your tank regulator and replace tank if empty. Repeat dry gas calibration check instructions on page 31.

(Calibration display flow chart is shown on p. 43)

How to Check Status

This function allows you to check the status and internal conditions of your FC20.

Press the **Function** button until display reads "STATUS".

Press the **Execute** button. Display shows Model, Serial Number, Software Version, and Software Release Date.

Press the **Function** button. Display shows Battery Status and battery type.

Press the **Function** button. Display shows Temperature.

Press the **Function** button to exit settings.

Momentarily press **Power** to return to the testing mode.

Fuel Cells

Fuel cells are highly durable sensors that are capable of providing accurate breath alcohol results for years. There are, however, a few precautions you should take to make certain that these devices perform for the longest period of time possible.

Use the device. Fuel cells like moisture, so it is a good idea to take tests periodically to provide needed moisture to the fuel cell, especially in dry climates. You do not need alcohol, just breath.

Avoid cigarette smoke! Make certain no one is permitted to blow cigarette smoke into the unit. This can damage or destroy the fuel cell.

Cleaning

Use of a mild disinfectant cleaner and a soft cloth on the outside of the case is recommended periodically to keep your unit clean. Do not use alcohol to clean the unit.

Batteries

Your FC20 default setting is for four AA batteries. However, you do have the ability to use NiMH rechargeable batteries as well.

To use NiMH, insert the batteries as directed and power on the unit.

Press the **Function** button until the display reads "SETTINGS".

Press the **Execute** button. Display shows "TIME".

Press the **Function** button until the display shows "BATTERY TYPE".

Press the **Execute** button to change your battery settings.

Press the **Function** button to save your settings.

Momentarily press the **Power** button to return to the testing mode.

The four batteries in your FC20 should last for about 160 hours of "on" time or up to 6000 tests. It is recommended you use high-quality alkaline batteries with your unit.

AlcoMark® Explained

AlcoMark is a software program developed by Lifeloc, exclusively for use with Lifeloc's breath testing equipment. AlcoMark software enables you to download, track, store and print test results from your FC20 to your computer. The AlcoMark CD comes with a cable and instruction manual.

Data Download - With AlcoMark, you can view and download any or all of the tests and any or all of the calibration events stored in the FC20 to a Microsoft Excel spreadsheet, a comma delimited text file or an XML file.

Printout - With AlcoMark, you can print any test result or calibration event stored in your FC20 through your computer's printer.

Remote Diagnostics - With AlcoMark, you can save time and money by having remote diagnostics performed after downloading information from your FC20 to your computer and e-mailing it to Lifeloc.

AlcoMark® Set-up

Install the software on your computer using the AlcoMark CD and instruction manual.

Select AlcoMark as your printer by following the printer selection instructions on page 21.

Connect the FC20 to the serial port on your computer, using the computer cable supplied with AlcoMark software.

Messages Explained

Message	Explanation
<1.3L Retest or Try Manual Test	Breath flow ended before the subject blew 1.3 liters of breath. Instruct subject to try again or use manual test mode.
>0.6	BAC is unusually high and above 0.6 BAC. Subject may require medical attention.
Air Blank Failed	Alcohol was detected during an air blank. Move to another location and retry.
Calibration/Cal Check Expired	Calibrate or Cal Check the unit.
Calibration/Cal Check Expiring	The unit is within 48 hours of the Calibration or Cal Check lockout time.
External Interference	External interference has been detected. Move to a different location and try again. If error persists call Lifeloc Technical Support
Flow Error - Retry & Blow Steadily	Exhalation not complete or interrupted. Instruct subject to blow steadily as long as they can.
Invalid Calibration/Cal Check	No alcohol was detected. Repeat setup, then retest.
Log Empty	There are no results in the memory.
Low Battery	Battery voltage is too low to take a test. Replace batteries.
Low Li Battery	The internal clock battery is low. Contact Lifeloc Technical Support.
Printer Error	Check that printer is connected and power is on.
Pump Reset Needed	The pump needs to be reset. Follow onscreen instructions.
Temperature	When calibrating or taking a test, unit is outside of temperature limits. Calibration range = 68° - 95° F (20° - 35° C) Testing range = 32° - 130° F (0° - 55° C)
Timeout	User blew for > 15 seconds. Try again, blow harder.

Lifeloc Factory Warranty

The FC20 comes with a one year limited parts and labor warranty, effective on the date of purchase by the end-user.

The Warranty covers:

- Parts and labor on covered repairs

- Software updates, as applicable

- Air freight back to the customer after the unit is repaired (U.S. only)

The Warranty does not cover:

- Freight to the Lifeloc factory

- Misuse, abuse, negligence or accidents

Lifeloc Technologies, Inc. ("Lifeloc") warrants to the buyer that at the time of shipment from Lifeloc's facilities, all new Lifeloc Equipment purchased through Lifeloc or one of our authorized distributors will be free from defects in material and workmanship, under normal use and service, provided that the buyer gives Lifeloc written notice of any defect within twelve (12) months from original invoice date (the "Warranty"). The term "Lifeloc Equipment" includes all [portable hand-held and fixed station breathalyzers manufactured by Lifeloc], as well as all printers, keyboards, cables, cases, and power supplies purchased as part of a new Lifeloc kit configuration. Software is warranted to perform substantially in accordance with Lifeloc user manuals and to be free from defects in materials and workmanship under normal use and service for a period of twelve (12) months from original invoice date.

The Warranty does not apply if the product has been altered, customized, repaired, reported stolen or modified by someone other than a Lifeloc factory authorized technician, or if parts other than Lifeloc approved parts are used in replacement or repair.

The buyer's exclusive remedy and Lifeloc's sole liability for breach of the Warranty shall be repair, replacement or, at Lifeloc's option, refund of the original purchase price paid by the buyer to Lifeloc for the Lifeloc Equipment that is shown, to Lifeloc's reasonable satisfaction, to be defective in breach of the Warranty ("Defective" and, the defect causing the Lifeloc Equipment to be Defective, a "Defect"). Under no circumstance shall Lifeloc be liable for an amount that exceeds the lesser of the cost of replacement or the original purchase price paid by the buyer to Lifeloc for the Lifeloc Equipment. Lifeloc shall not be responsible for any customer software, customer settings or configuration data or customer test records resident in any products returned for service, repair, warranty or recertification.

Lifeloc assumes no risk for damage in transit. If Lifeloc determines that a Defect was outside of or not covered under the Warranty, Lifeloc will estimate repair and service charges and obtain the buyer's authorization prior to conducting any work to repair the Defective Lifeloc Equipment. Following repair, the Lifeloc Equipment will be returned to the buyer via standard ground transportation prepaid. Express charges, if authorized by the buyer, will be invoiced at the difference between the express charges and the standard return shipping charges.

Lifeloc shall not incur costs related to loss, damage or incomplete or inaccurate paperwork of returned product regardless of origination point.

THIS WARRANTY IS THE PURCHASER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED. LIFELOC SHALL NOT BE LIABLE FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR LOSSES, INCLUDING LOSS OF DATA, WHETHER ARISING FROM BREACH OF WARRANTY OR BASED ON CONTRACT, TORT, RELIANCE OR ANY OTHER THEORY.

NOTWITHSTANDING ANYTHING TO THE CONTRARY IN THE FOREGOING WARRANTY, OR IN ANY AGREEMENT BETWEEN THE BUYER AND LIFELOC PERTAINING TO ANY LIFELOC EQUIPMENT, OR AT LAW OR IN EQUITY:

THE WARRANTIES, OBLIGATIONS, AND LIABILITIES OF LIFELOC, AND THE REMEDIES OF THE BUYER SET OUT IN THE FOREGOING WARRANTY, ARE SOLE AND EXCLUSIVE, AND ARE MADE AND ACCEPTED BY THE BUYER IN LIEU OF, AND THE BUYER WAIVES AND RELEASES, ALL OTHER WARRANTIES, OBLIGATIONS, AND LIABILITIES OF LIFELOC, AND ALL OTHER CLAIMS AND REMEDIES OF THE BUYER, EXPRESS OR IMPLIED, ARISING BY STATUTE OR OTHERWISE, WITH RESPECT TO ANY DEFECT IN LIFELOC EQUIPMENT, INCLUDING BUT NOT LIMITED TO THE WAIVER AND RELEASE BY THE BUYER OF THE FOLLOWING: (i) ANY STATUTORY OR IMPLIED WARRANTY OF MERCHANTABILITY OR OF FITNESS FOR ANY PURPOSE, (ii) ANY IMPLIED WARRANTY ARISING FROM COURSE OF DEALING, COURSE OF PERFORMANCE OR USAGE OF TRADE, AND (iii) ANY OTHER RIGHT, CLAIM, OR REMEDY WHATSOEVER OF THE BUYER OR OF ANY PERSON OR ENTITY CLAIMING BY, THROUGH, OR UNDER THE BUYER AGAINST LIFELOC, WHETHER ARISING PURSUANT TO THE FOREGOING WARRANTY, PURSUANT TO ANY AGREEMENT PERTAINING TO LIFELOC EQUIPMENT, OR IN CONTRACT, IN INDEMNITY, IN TORT (INCLUDING, BUT NOT LIMITED TO, NEGLIGENCE), IN PRODUCTS LIABILITY, IN STRICT LIABILITY, OR OTHERWISE. BY ACCEPTING OR USING LIFELOC EQUIPMENT, THE BUYER FURTHER ACKNOWLEDGES, UNDERSTANDS, AND AGREES THAT NO STATEMENT OR REPRESENTATION HAS BEEN MADE BY LIFELOC, OR RELIED UPON BY THE BUYER, THAT IS INCONSISTENT WITH THE FOREGOING WARRANTY.

Without prejudice to the foregoing, Lifeloc shall not have any obligation or liability, and the buyer acknowledges that Lifeloc shall not have any obligation or liability whatsoever,

to the buyer, or to any person or entity claiming by, through, or under the buyer, whether arising pursuant to the foregoing Warranty, pursuant to any agreement pertaining to Lifeloc Equipment, or in contract, in indemnity, in tort (including, but not limited to, negligence), in products liability, in strict liability, or otherwise, (i) for any transportation, installation, removal, reinstallation, adjustment, or other expenses related to any Lifeloc Equipment covered by the Warranty or to other property, (ii) for any damage or loss to any property other than the Lifeloc Equipment covered by the Warranty, or (iii) for any special, indirect, incidental, or consequential damage or loss, even though such expenses, damages, or losses may be foreseeable, including, but not limited to: loss of profits or revenues, loss of use or equipment, cost of capital, cost of substitute equipment, repairs, or facilities, cost of downtime, or cost of purchased or replacement equipment or parts.

The limited remedies of the buyer set forth above shall be exclusive even though they may fail of their essential purpose. No agreement varying or extending the foregoing Warranty, no remedies, no exclusions, or no limitations shall be effective unless in a writing signed by an executive officer of LIFELOC. The correction of any Defect shall in no way extend the duration of the Warranty; only the unexpired warranty term of the Lifeloc Equipment applies to any repaired or replacement Lifeloc Equipment that is provided under the Warranty.

The Warranty is non-transferable and is effective on all Lifeloce Equipment purchased from and after [September 1, 2014]. Rights and recourse may vary by country.

Extended Service Plans

Extended Service Plans are available for your FC20. These provide complete coverage for an additional year at a reasonable cost and include free factory diagnostic checks. Call Lifeloc for details or purchase online at www.lifeloc.com/esp

Service

If your FC20 should require repairs or maintenance, Lifeloc is here for you. Just an email or phone call will put you in contact with our technical support personnel. Many minor adjustments can be made over the phone.

Repairs are completed within 5 days for up to 5 units or it's free.

Notice

The FC20 is a professional device designed to be used by trained operators in conjunction with a specified, periodic maintenance and calibration/calibration check regimen. **Use by untrained operators or without periodic calibration or calibration checks may result in invalid results or incorrect interpretation of results. FC20 is not to be used by children under 12 years of age.**

DO NOT DRINK AND DRIVE. Lifeloc strongly recommends that no vehicle or machinery be operated after alcohol consumption. Even small quantities of alcohol can result in driving impairment.

The FC20 is not waterproof and should not be immersed in or exposed to excessive water. The FC20 is not suitable for use in a potentially explosive environment. The FC20 cannot be used inside an oxygen tent.

If instrument will not be used for more than 6 months remove battery to avoid damage to the instrument caused by leaking battery acid.

Disposal of Instrument

At the end of the instrument's service life:

- Do Not dispose of the FC20 as unsorted municipal waste.
- Dispose of the FC20 in accordance with national waste disposal regulations.

Lifeloc FC20

Specifications

Size .... 2.6″ x 5″ x 1.25″ (66 x 127 x 32 mm)

Weight [w/ batteries] .... 9 oz. (255 grams)

Measurement Range .... .000 to .600 BAC

Accuracy .... +.005 BAC up to .100 BAC

+5% for .100 - .400 BAC
Unit will read up to a .600

Battery Life .... Approximately 160 hours or up to 6000 tests

We recommend storing the FC20 in temperatures between 32° - 130° F (0° - 55° C)

Accessories & Supplies

Lifeloc offers a complete line of accessories and supplies for your FC20, including:

For the most current listing of supplies for your FC20, go to:

- **www.lifeloc.com. Click on Order Products**

You can place your order online, via fax to 303.431.1423 or call Customer Service at 303-431-9500 or 800-722-4872.

Mouthpieces

Rubber Grip

Carrying Cases

Certified
Simulator
Solution

Dry Gas Standards
and Calibration Kits

EASYCAL®
Calibration Station

Available Upgrades

The FC20 has extended features that can be ordered from the factory. These are not standard on the unit and are only available as special order items.

The available factory options include Auto Air Blank, Data Field 2, & QWERTY keyboard.

Auto Air Blank

An automatic air blank is a test of the ambient air. It checks to ensure that no alcohol is present, which could affect the test result.

If Auto Air Blank is enabled, the FC20 will prompt you to take a sample before an Auto, Manual or Passive test.

Auto Air Blank is normally utilized to satisfy the requirements of a specific testing protocol.

Sample Printouts

Long Printout

```
-----------------------------
 Lifeloc Technologies, Inc.
 FC20              v6.00
 Serial No.        01080
-----------------------------
Units:              BAC

AUTO TEST #       857

Result:            .101
Time:              09:53
Date:         12/12/2005

Last Calibrated:
Cal Standard:      .040
Time:              07:47
Date:          5/11/2005
Temperature:      24.6C

Last Check:
Cal Standard:      .040
Result:            .040
Time:              11:25
Date:          5/14/2005

_____
        Subject

_____
         I.D.

_____
       Operator
```

Short Printout

```
-----------------------------
 Lifeloc Technologies, Inc.
 FC20              v6.00
 Serial No.        01080
-----------------------------
Units:              BAC

AUTO TEST #       857

Result:            .101
Time:              15:26
Date:         05/20/2005
Temperature:      24.6C


_____
        Subject

_____
         I.D.

_____
       Operator
```

Cal/Cal Ck Printout

```
-----------------------------
 Lifeloc Technologies, Inc.
 FC20              v6.00
 Serial No.        01080
-----------------------------
Units:              BAC

Last Calibrated:
Cal Standard:      .040
Time:              07:47
Date:         02/11/2005

Last Check:
Cal Standard:      .040
Result:            .040
Time:              15:26
Date:         02/14/2005
-----------------------------
```

User Settings Chart

Settings — Execute → **Time**

Time
Function
Date
Function
Auto Air Blank (optional)
Function
Shutoff Time
Function
I.D. Settings
Function
Data Field 2 (optional)
Function
Trigger Mode
Function
Security Settings
Function
Print Settings
Function
Display Settings
Function
Battery Type
Function
Exit

Execute →

Number of Copies
Function
Print Format
Function
Printer
Function
Printer Darkness
Function
Exit

Execute →

LCD Contrast
Function
Test Order
Function
Results Format
Function
Pass Level
Function
Fail Level
Function
Exit

Lifeloc FC20

Calibration Display Chart

```
                    Calibration

                       │
        ┌── Execute ──►  XXX        ── Execute ──►   Perform a
                         Check                        Cal Check
                           │
                        Function

                         XXX        ── Execute ──►   Perform a
                      Calibration                    Calibration
                           │
                        Function

                         Cal        ── Execute ──►      Cal
                       Settings                       Standard
                           │                             │
                        Function                      Function

                          Exit                       Standard
                                                       Type
                                                         │
                                                      Function

                                                     Cal Time
                                                       Type
                                                         │
                                                      Function

                                                     Cal Time
                                                         │
                                                      Function

                                                      Check
                                                       Time
                                                         │
                                                      Function

                                                     Lockout
                                                       Type
                                                         │
                                                      Function

                                                       Exit
```

Lifeloc

TECHNOLOGIES

Unlock the Power of Alcohol Testing

12441 West 49th Avenue, Suite 4
Wheat Ridge, CO 80033
303.431.9500 | 800.722.4872
fax: 303.431.1423
www.lifeloc.com

Hours of Operation: 7:30 am - 5:00 pm MST
If you are calling outside of these hours, please leave us a voice message. We will contact you the following business day!

From our single location in Wheat Ridge, Colorado, we manufacture and service our products with you in mind. Every product is designed with quality and ease-of-use as our priorities. And our 5 Star Service is the fastest in the industry.

Lifeloc breath testers are used across the US and in over 35 countries. We carry all of the accessories and supplies for your breath test equipment. Please call us to reorder supplies and accessories or for information on purchasing additional testers.

Lifeloc FC20
Operations Manual