

**LifeSafer®**  
Ignition Interlock

**FC100 Ignition Interlock User's Guide**  
*(With or without camera)*

Also available in Spanish.



**LifeSafer®**  
Ignition Interlock

**855-710-2423**

[www.LifeSafer.com](http://www.LifeSafer.com)

© 2020 #1A LifeSafer Inc. All rights reserved.

## TABLE OF CONTENTS

|  |      |
|--|------|
| Overview .....                               | 3    |
| How Does The Device Work .....               | 4    |
| Target Tracking And Testing Position.....    | 6    |
| Testing.....                                 | 7    |
| Test Results.....                            | 10   |
| Retest .....                                 | 12   |
| Troubleshooting.....                         | 13   |
| Service/Monitoring Appointments.....         | 17   |
| Proper Car and Use.....                      | 18   |
| Camera Display Overview .....                | 19   |
| Handset Display Overview .....               | 20   |
| Notes.....                                   | 22   |
| Contact Numbers and 24 Hour Assistance ..... | Back |

# OVERVIEW

This manual contains operating instructions for the use of the LifeSafer® FC100 Ignition Interlock Device (IID) with or without a camera.

**Not all jurisdictions require the addition of a camera. If you are not required to have a camera please disregard any instructions on camera usage.**

The purpose of an IID is to prevent vehicle start-up until the user has passed an alcohol test. The IID is not an indicator of your level of impairment or your ability to safely operate a vehicle. You must rely on your own judgment. If you have been drinking alcoholic beverages, please find an alternative form of transportation.

This handbook explains the use of the LifeSafer FC100 IID, including operation, reporting, and care of the unit. Please take the time to read this handbook while you are waiting for the IID to be installed in your vehicle, so any questions you may have can be answered before you leave.

Today, you will be trained on the proper use of the LifeSafer FC100 IID. Your service provider will also confirm the date of your first service appointment. At each service appointment the device's event log will be downloaded and reported to your Monitoring Authority.



## **WARNING:**

*It is your responsibility to keep your IID in good working order. You will be responsible for any lost or damaged parts of the unit.  
Please call 1-866-614-8276 for details on our Loss Protection Plan.*

## HOW DOES THE DEVICE WORK?

### LIFESAVER FC100 HANDSET

The LifeSafer FC100 Handset takes your breath sample into the fuel cell chamber. The presence of alcohol in the sensor chamber causes the fuel cell to produce an increased electrical current, which is measured and translated into an equivalent blood alcohol concentration (BAC). You must complete a breath test when requested and the Device will record your Breath Alcohol Concentration (BrAC).

### JURISDICTION CAMERA REQUIREMENT

Some jurisdictions require the addition of a camera so that the person taking the test can be identified and submitted to a monitoring authority as part of the reporting process.

The LifeSafer FC100 Camera takes your picture and will not let you take a test until it has you and the Handset in focus. The Handset must stay in view of the Camera at all times as you blow and test, otherwise the device will ABORT and you will have to start over.



# HOW DOES THE DEVICE WORK?

## LIFESAVER FC100 CAMERA



The LifeSaver FC100 with Camera System Handset is controlled by the Camera. The Camera must detect your image and “see” the target on the back of the Handset before it will allow you to take a test. Hold the Handset 4-8 inches from the front of the Camera module in order to get the Camera to release the Handset for the test.

In bright light it may be necessary to slowly wave the target on the back of the Handset around in front of the Camera to get the target in clear view. Once the Camera finds the Handset the “BLAP-BLAP” sound will stop. The BLOW light will flash and the Handset will make a higher pitched “BEEP-BEEP” indicating you may start a test.

**TIP:** If the Handset stays stuck in WAIT make sure your hand is not covering the target. Grip the Handset towards the bottom as shown in the photo.

## TARGET TRACKING AND TESTING POSITION

### TARGET TRACKING

Target tracking requires that you keep your image and the Handset in full view of the Camera throughout the test in order to obtain valid photographic identification of the tester.



### TESTING/TRACKING POSITION

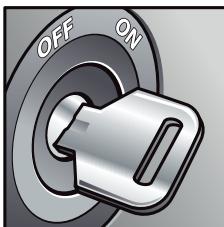
After the Handset has been detected and released to allow a test, it is time to blow into the device. While taking the test the best area to hold the Handset is 18-24 inches from the front of the Camera module. The Camera module is placed on a swivel mount to allow adjustment. Adjust the Camera so it is pointing towards where you will hold the Handset while sitting in the driver's seat.



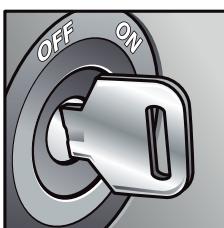
# TESTING

## TIME TO TEST

You must complete a breath test that indicates your Breath Alcohol Content (BrAC) is below the fail point required by the jurisdiction before it will allow you to start your vehicle.



When you are ready to take a test, the first step is turning your ignition switch to the "ON" position.

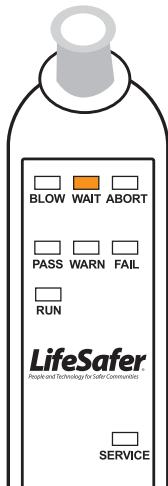


Once the Device wakes up and the WAIT light glows orange, turn the key back to the "OFF" position.

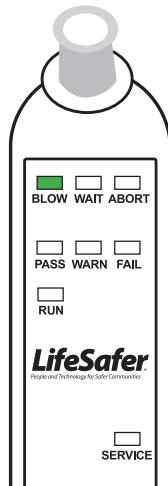


For push start vehicles, push the start button WITHOUT pressing on the brake. This should enable your vehicle's electrical system, waking up the device but NOT engage the starter. Please check you vehicle's user manual to ensure you are turning on the power but not the starter before testing.

## TAKING A TEST



**Wait Light  
(Orange)**  
Once a test has been initiated, the **WAIT** light glows indicating the sensor is warming up, and the Handset is preparing to accept a breath test.

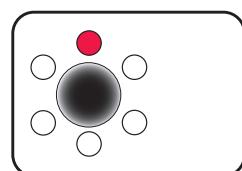


**Blow Light  
(Green)**  
Once the sensor is ready for a test the Green **BLOW** light comes on.

**NOTE:** Under normal operating conditions, the WAIT light stays on momentarily while the sensor warms up. If you are operating your Device in extremely cold temperature conditions (-40°F), the Device can take up to 4 minutes to warm-up.

### Camera Light (Red)

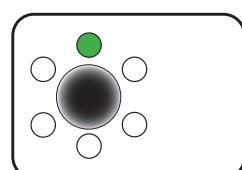
While the WAIT light is flashing and the Handset is emitting a "BLAP BLAP" sound, the red light on the Camera will be on, indicating that the target on the Handset has not been detected.



Hold the Handset within 4-8 inches of the Camera module, gripping the Handset at the bottom with the target in clear view of the Camera module. You may have to slowly wave the Handset around in front of the Camera module to detect the target.

### Camera Light (Green)

When the target tracking feature is turned on and the Camera is successfully tracking the Handset during the test period, the green light on the Camera will illuminate.



# TESTING

## Blow Light (Green)

Once the target is detected, the **BLOW** light will flash green indicating the Device is ready for a breath sample. You will also hear 2 high pitched beeps while the **BLOW** light is flashing to alert you that a breath test is requested. Take a deep breath and immediately bring the Handset to your mouth to test, keeping the target in view of the Camera.

While taking a test, you must also make a **TONE**, like a musical instrument. It is most easily accomplished by saying the word "DO", "DAA", or "DEE" into the mouthpiece as you blow.

The blowing pressure must be sufficient in strength and duration to ensure a proper and accurate test. When you start to blow and make the "DO" tone, (steady and solid, never too hard or too soft), the Device will emit a low sound, indicating that you are testing properly. Continue the test until the sound stops and a higher pitched tone sounds.

If you do not deliver a sufficient flow of air or the tone is not delivered properly, the Handset will sound a higher-pitched triple-beep and the red **ABORT** light will come on.

***If you do not hear the Device sound, or the Device ABORTS, stop blowing.  
You need to start over.***

### NOTE:

- You should concentrate more on blowing than on the tone.
- Extreme blowing pressure is not necessary.
- The tone must be delivered in a steady and continuous fashion.
- Deliver the same tone rather than going up or down the musical scale.
- You must say the tone continuously for the entire five seconds.
- It may help to bite down with your teeth and seal your lips on the mouthpiece.

Blowing and making a "DO", "DEE", and "DAA" for a breath test will quickly become second nature to you. Do not blow too hard. Start the test blowing softly and increase your blowing pressure until you hear the tone that indicates you are blowing hard enough. Continue to blow steadily at that level for the length of the test.



# TEST RESULTS



## **Pass Light (Green)**

When the Device receives a proper breath sample the **PASS** light will glow and a triple tone will sound indicating a successful test.

**You can start your vehicle!**

## **Run Light (Green)**

If the result of the test is a **PASS** or a **WARN** the Device will subsequently Flash the **RUN** light and close the ignition relay, allowing a vehicle to start. The relay will remain closed for 1 minute while waiting for the engine to start. If the engine is not started the relay will open back up and the Device will go back to sleep and another test will need to be taken. When the engine is started, the **RUN** light will change from *Flashing* to *On Steady*.

Once the engine is shut off, the **RUN** light will flash for the duration of the Stall Protect period (when a restart is allowed without requiring a test). Once the **RUN** light goes out, the Device will go into a “sleep state” where it is waiting for the driver to start a new test.

# TEST RESULTS



## ***Fail Light (Red)***

The Device has detected the presence of alcohol above the preset **FAIL** level.



## ***Warn Light (Orange)***

The Device has detected the presence of alcohol on your breath below the FAIL level.

A substance that left trace amounts of alcohol in your breath may have caused this. If that substance happens to be a recently consumed alcoholic beverage, you need to keep in mind that your blood alcohol level may be rising and you may FAIL on the next test and a Violation will be recorded.

### **TIP:**

Eating, drinking, using mouthwash, or medicines that contain alcohol immediately prior to a breath test may result in a FAILED test. If this happens, rinse your mouth out with water, take a few deep breaths of fresh air, and retest after waiting at least 5 minutes.



### Retest

If the key is in the ON position and the vehicle is running the Device will ask for a Retest at random times. When the device wants you to Retest, the **BLOW** light will be flashing and two high-pitched BEEPS will sound. If the Device does not receive a passed test within the first several seconds after asking for a Retest, the Device will begin to BEEP louder. If the Device does not receive a passed test after a few minutes, an additional alarm may sound. You now have a limited time to pass a test or pull the vehicle over and turn the key OFF or a Violation will be recorded. Turning the vehicle off prior to taking a Retest when requested is a Violation in some jurisdictions. Ask your Service Provider if you have questions on the rules in your area.

Take the Retest only when you feel it is safe to do so. You are encouraged to safely pull the vehicle out of traffic to take the Retest. **IT IS YOUR RESPONSIBILITY TO SAFELY TAKE THE RETEST.** You have several minutes from the time the unit first asks for a Retest to pass a test. Depending on your jurisdictional requirements, if you fail a retest, you may receive an audible warning notifying you to pull the car over out of traffic and turn off the vehicle.



### CAUTION:

Always exercise safety first. Pull off the road and come to a complete stop before taking the Retest. It is your responsibility to be in a safe place to take the test in a manner not to put yourself or others at risk.

# TROUBLESHOOTING



## **Abort Light (Red)**

The **ABORT** light indicates the Device did not detect a proper breath sample, meaning either the blow was too hard or too soft, or the tone was not detected. You will also hear a distinct tone upon aborting a breath test.

Aborting the test in this fashion does not mean you failed the test and is different than a Camera Abort caused by taking the Handset out of view of the Camera. (See Camera Abort on next page).

Once you have aborted, the **WAIT** light will come on for 45 seconds while the Device prepares itself to accept another test.

If you have too many Aborts, the **WAIT** light glows while the Device is resetting or restabilizing itself. The **WAIT** light could stay on for up to 5 minutes during this wait period. When the Device is ready for another test, the **WAIT** light will flash and the Handset will emit a "BLAP-BLAP" sound.

If the Device has not stabilized after the wait period and the Device is not ready to test, the **SERVICE** light and **LOCKOUT** light will begin to flash and the **WAIT** light will stay on. If this ever happens call your Service Provider immediately.

**TIP:** If you get an ABORT, change your mouthpiece, try to relax, take a couple of deep breaths and try again. You should never blow so hard as to make yourself feel light-headed or dizzy.

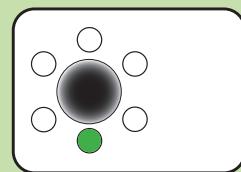


### Camera Abort

If the Camera is unable to track the Handset during the blow sequence, the **ABORT** light will go on. You will also hear a "BLAP BLAP" tone and the orange **WAIT** light will flash. Once you have aborted, the orange **WAIT** light will come on for 45 seconds while the Device prepares itself to accept another breath test.

**NOTE:** When the target tracking is turned on and the Camera is successfully tracking the Handset during the test period, the green light on the Camera will illuminate. If target tracking is enabled and you do not observe the green light come on during the test, you are most likely not in the correct position.

The Camera optimally tracks the Interlock at a distance between 18 - 24 inches. Target tracking is not enabled in all jurisdictions.



**TIP:** Keep the Handset Target in clear view of the Camera throughout the Test!

# TROUBLESHOOTING



## **Lockout Light (Red)**

One or more FAILS in a row will result in a LOCKOUT status for several minutes.

While the **LOCKOUT** light is glowing red you cannot take another test. You must WAIT. After the **LOCKOUT** light turns off you may test again. You are encouraged to rinse your mouth out with water to remove traces of mouth alcohol and test again.

## **Service Light (Red)**

The Device will remind you several days before your program service due date by flashing the **SERVICE** light.

## SERVICE/MONITORING APPOINTMENTS

Periodically you will be required to have the device's data downloaded, reviewed, and reported by the service provider to the relevant regulatory authority. The device, vehicle, and wiring may be inspected for signs of tampering, and the calibration of the device will be checked.

The following is an example of the information the device records and the type of information that the service provider may be required to report:

### Recorded Violations:

- **Start-up Violations** – Starting the vehicle without passing a test within the required time frame, which varies by jurisdiction.
- **Power Disconnect** – Power is lost to the device's Relay Box. You should document any reason why the power was disconnected.
- **Failed Test** – Failing one or more test attempts indicating BrAC at or above the Fail level.
- **Retest Refused** – The driver failed to pass a Retest during the allowed period of time.
- **Retest Failed** – The driver took the Retest and Failed one or more test attempts at or above the Fail level.
- **Lockouts** – The number of Lockouts between service is recorded.
- **Early Service Recall** – If you have met the maximum number of any Violations an Early Service Recall will be recorded and the device will prompt you to return to the Service Center.
- **Time of Vehicle Use** – All vehicle starts are recorded and may be used to determine if the vehicle was operated during a restricted driving time.

### Required Reporting:

#### Non-Compliance

- Failure to report for scheduled monitoring check or any Early Recall that results in a Lockout
- Failure to pay for program services provided
- Failure to meet any other terms and conditions of the Interlock Program

# SERVICE/MONITORING APPOINTMENTS

## Circumvention:

- Getting someone else to blow the breath test
- Providing a breath sample using a pump, balloon, etc. instead of human breath sample
- Disconnecting the vehicle's battery without authorization from the Service Provider
- Attempting to move or obscure the camera

*Note: If the camera falls from where it was installed, contact your service provider to have it remounted.*

## Tampering:

- Breaking of any anti-tampering seal on any part of the device including wires and connectors
- Opening the device
- Physically damaging the device in any way

## Scheduled Service and Lockouts:

The device will remind you of your service due date by flashing the service light.

If you don't return for service by the required date, you are in EARLY RECALL and both the **LOCKOUT** and **SERVICE** lights will flash.

The device will enter PERMANENT LOCKOUT if it isn't serviced. If this happens, you will not be able to take a test or start your car. **You will need to call to obtain a lockout override code or have the vehicle towed at your expense.** When the **SERVICE** light and **LOCKOUT** light both remain solid the device is in PERMANENT LOCKOUT and will not ask for a test.

If you have to change a scheduled monitoring appointment you must call 866-614-8276, 24 hours in advance to avoid a Missed Appointment Fee.



## **PROPER CARE AND USE**

### **Vehicle Electrical Systems**

The device operates off your vehicle's electrical system. If your vehicle is over 10 years old, you should have the electrical system checked by an automotive professional. If your vehicle has electrical problems or a failed alternator, the power surges can damage the device and void the warranty. If applicable, maintain proper water-levels in your car battery (use distilled water) and keep the terminal connections clean and free of corrosion. The device will usually work with an old battery, but bad or weak batteries are the primary cause of problems that can result in Early Service Recall and an unscheduled visit to the service provider at your expense. If your car battery is weak or old, ask your LifeSafer Service Provider what your jurisdiction's regulations are for having it replaced. Since all power disconnects are recorded and reported, you must document each time the battery is disconnected, or the device is disconnected from power.

### **Avoid Contact with Moisture and Dirt**

The device is not waterproof. It is an electronic product. Keep it out of the rain. Keep the device stored off the floor of your vehicle. Excessive contact with moisture, dirt, mud, or rain will damage the internal circuitry for which repair or replacement of the device is your responsibility.

### **Avoid Electro-Static Discharge (ESD)**

Place the key in the ignition before picking up the handset. ESD, especially during the cold and dry winter months, is common and may damage the device.

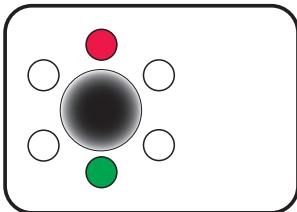
### **Handset Care**

Periodically wipe the handset with a clean, dry cloth. Do not place the handset on the floor of the vehicle. Use a clean, dry mouthpiece for each test. Mouthpieces may be washed with soap and water.

# CAMERA DISPLAY OVERVIEW

| Indicator              | Color | Description   |
|------------------------|-------|---|
| DETECT<br>(On Steady)  | RED   | The Camera has not detected the Handset in the image and cannot allow the user to take a test.          |
| DETECT<br>(Off Steady) | RED   | The Camera has detected the Handset in the image.<br>The user should now be able to take a test.        |
| TRACK<br>(On Steady)   | GREEN | The Camera is actively tracking the Handset in the image.   |
| TRACK<br>(Off Steady)  | GREEN | The Camera is not able to track the Handset in the images and will force the Handset to ABORT the test. |

## CAMERA



# HANDSET DISPLAY OVERVIEW

| Indicator                   | Color   | Description   |
|-----------------------------|---|---|
| <b>WAIT</b><br>(On Steady)  |    | The Device is preparing to accept a breath test. This lasts for varying amounts of time depending on temperature, from a few seconds to up to five minutes in below zero temperatures.  |
| <b>WAIT</b><br>(Flashing)   |    | <b>Before a test is taken:</b> This indicates that the Camera has not detected the Handset in the image. The Handset will emit a "BLAP BLAP" tone.<br><b>After a test is taken:</b> This indicates that the Camera was not able to detect or track the Handset during the test. |
| <b>BLOW</b><br>(Flashing)   |    | The Device is ready to accept a breath test. Hum and blow into the Device for about 5 seconds. Device will emit a low tone indicating that you are blowing properly.  |
| <b>ABORT</b><br>(On Steady) |    | Improper breath test delivered. User did not hum and/or blow in a steady solid fashion. Device will default back to the WAIT stage and you may repeat the test.   |
| <b>PASS</b><br>(On Steady)  |    | User has properly passed the test and may start the vehicle.  |
| <b>WARN</b><br>(On Steady)  |    | After delivering a breath test, alcohol was detected at a low level, but not enough to FAIL and you may still start the vehicle.  |
| <b>FAIL</b><br>(On Steady)  |    | User has failed the alcohol breath test.<br>Device will either default to WAIT or to TEMPORARY LOCKOUT.   |
| <b>FAIL</b><br>(Flashing)   |    | You have failed the breath test with a very high BAC reading.<br>Device will either default to WAIT or to TEMPORARY LOCKOUT.  |
| <b>RUN</b><br>(Flashing)    |    | You may start your vehicle at this time by turning the key either after passing a test or while in Stall Protect if your vehicle stalls out.  |
| <b>RUN</b><br>(On Steady)   |    | This indicates that the engine is running.  |
| <b>POWER</b><br>(On Steady) |   | This light comes ON when key is ON and goes OFF when the Key is turned OFF, indicating proper power to the Device.  |
| <b>POWER</b><br>(Flashing)  |  | Indicates your vehicle battery is weak or the voltage is low.   |

| <b>Indicator</b>                         | <b>Color</b> | <b>Description</b>   |
|--|--------------|--|
| <b>SERVICE</b><br>(Flashing)             |              | This is a reminder that the scheduled monitoring appointment is coming due.  |
| <b>SERVICE</b><br>(Flashing)             |              | You are either past due for service or in EARLY RECALL due to violations, tampering, circumvention or a device problem. The device will enter a PERMANENT LOCKOUT if you fail to return to the service center.   |
| <b>LOCKOUT</b><br>(Flashing)             |              | The number of flashes on the LOCKOUT light, (3 for example), indicates the number of days before the Device goes into PERMANENT LOCKOUT.   |
| <b>SERVICE</b><br>(Flashing in Sequence) |              | The number of flashes on the LOCKOUT light, (3 for example), indicates the number of days before the Device goes into PERMANENT LOCKOUT.   |
| <b>LOCKOUT</b><br>(Flashing in Sequence) |              | Your vehicle is temporarily inoperable because you had too many failed tests, high BAC tests or aborts or is due to a pre-set restricted driving period. The TEMPORARY LOCKOUT Period can vary from 5 minutes to 24 hours before it will accept another breath test. |
| <b>LOCKOUT</b><br>(On Steady)            |              | Your vehicle is temporarily inoperable because you had too many failed tests, high BAC tests or aborts or is due to a pre-set restricted driving period. The TEMPORARY LOCKOUT Period can vary from 5 minutes to 24 hours before it will accept another breath test. |
| <b>SERVICE</b><br>(On Steady)            |              | Your vehicle is inoperable and the Device and Vehicle are in PERMANENT LOCKOUT. You must call the Service Center to make arrangements for a service call or to have the vehicle towed.   |
| <b>LOCKOUT</b><br>(On Steady)            |              | Your vehicle is inoperable and the Device and Vehicle are in PERMANENT LOCKOUT. You must call the Service Center to make arrangements for a service call or to have the vehicle towed.   |

## HANDSET





## NOTES

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

---

## **24-Hour Service Assistance**

- ***We are always here to help you – 24 hours a day.***
- ***If you call after business hours, please listen carefully to the prompts which will allow you to leave a message, or speak to a Customer Care Agent***
- ***The Customer Care Agent will try to alleviate the issue if possible***

- *To schedule an appointment*
- *To make a payment*
- *For assistance*
- *If you experience any issues with your device*
- *If the device is notifying you that it needs service*

**Call our Customer Care Center**

**855-710-2423**

**LifeSafer**  
Ignition Interlock

*For more information about LifeSafer, visit us online at  
[www.LifeSafer.com](http://www.LifeSafer.com)*

*Or e-mail us at  
[info@LifeSafer.com](mailto:info@LifeSafer.com)*