1. Mouthpiece
2. Charge Indicator
3. Communication Indicator
4. Reset Button
5. Air Inlet
6. Up Button
7. Left Button
8. OK Button
9. Right Button
10. Down Button
11. Left Menu Button
12. Right Menu Button

**Taking a test:**

When a test is required, turn the key to the “On” position and then the handset will instruct the user through the process. The entire process has three steps: device preparation, blow and data analysis / test results. Note: If the key is in the on position for listening to radio etc… device will prompt for a test.
Device Preparation:

The handset needs to be warm up if the surrounding temperature is under 36 °F. Below are examples of what a device will display until it reaches the required operating temperature.

![Device preparation](image1)

Figure 1: Device preparation

The warm up time is correlated with the temperature. The lower the temperature, a longer time is needed. The “zero clearance” operation will also be in proportion with the amount of residual alcohol remaining in the device.

1. Blow:

After the data preparation step, the user can blow into the mouthpiece located on the side of the handset. While blowing, the user should use a firm and constant pressure blow for 4 seconds. With too strong or weak of a blow, the handset will interrupt the breath test. The screen will display “Blow interrupted, please continue…”, the user will need to blow again, using a firm and constant pressure blow for 4 seconds.

![Blow instruction](image2)

Figure 2: Blow instruction
The device is pressure sensitive. If the device does not detect the desirable amount of pressure (due to excess temperature, pressure variance due to an incorrect blow) a “Non-human breath! Test Failed!” caption will display on the units screen. This will not result in a violation, but the operator will have to retest until test is accepted.

With a correct blow, the status bar on the screen will display the progress. When the test is completed, the user will hear the air pump extracting the air. The user can stop blowing at this time. The process will move to the next step.
2. Data analysis and test results:

After taking a test, the device will automatically enter the data analysis phase. This phase will last for a few seconds. During this time, the device will not respond with any user operations.

The test result will display the BAC % along with a “Pass” or “Fail”. A passed test is labeled in green, while the failed test is labeled in red.

![Test Report]

With a passing test, the interlock will let the operator start their vehicle. For a failed test, the user will need to wait a few minutes and execute another test.

3. Rolling retest:

After a successful initial test, which will allow the vehicle to be started, the interlock will proceed into the Rolling Retest Process. When it’s time to take a Rolling Retest, the user will have 3 minutes to complete the rolling retest. The following screens will be displayed, indicating to the user the time (in seconds) left to take the rolling retest.

![Rolling Retest]

With a passing rolling retest, the device will proceed into a waiting status for the next rolling retest which will occur randomly every 5-35 minutes.
If the rolling retest is failed or the driver refuses to take the test in the 3 minute time period, an indication will be displayed on the screen, the alarm lamp will blink and it will be recorded in the user’s log. The screen will also display a message indicating to the user the device will go into a block state in 5 days.

![Figure 7: Rolling retest failed](image)

### Device lock-out:

The device will be sent into a lock-out state for any of the following:

- Service or Calibration Appointment is overdue
- A Rolling Retest is failed and the device is not reset by the service center within 5 days

Periodically, calibration is needed to guarantee the testing accuracy. When it’s time to calibrate, the device will display instructions and the device will be locked-out if not calibrated within the 5 day time span set by the administrator. With the device being locked, the user will need to contact their service center.

![Figure 8: Calibration](image)
Sample-Free Restart Process:

When the vehicle is shut off after being started, a sample-free restart shall be allowed for 3 minutes by default. If the device is shutdown when it is awaiting a rolling retest, the sample-free restart shall not be allowed. In this case, the device would continue the rolling retest process if the vehicle is restarted within the time specified for the stall time. If the vehicle is started after the specified time, the device will proceed to the initial testing process.

Mouthpiece:

The mouthpiece is designed to be a moisture trap. It may be washed and reused. Insure mouthpiece is dry before inserting back into interlock. Mouthpieces that are worn can be replaced by your service center.

Do not use alcohol to clean the mouthpiece. Any alcohol in the mouthpiece will cause a very high reading when taking a test.

Blood Alcohol Content:

The ignition interlock measures the intended driver’s blood alcohol content. If the driver’s blood alcohol content is greater than the preset limit, the interlock will not allow the vehicle to start.

Alcohol in the blood takes time to burn off (metabolize). The rate at which alcohol is metabolized is the same for virtually everyone regardless of their height, weight, sex, race or other such characteristics. Alcohol is metabolized at the rate of .015 of blood alcohol concentration (BAC) every hour. Thus a person with a very high BAC of .15 will have no measurable alcohol in the bloodstream after ten hours (.15 divided by .015 = 10). Here are some other examples:

<table>
<thead>
<tr>
<th>BAC Level</th>
<th>Metabolism Time in Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>.10</td>
<td>6.66</td>
</tr>
<tr>
<td>.08</td>
<td>5.33</td>
</tr>
<tr>
<td>.05</td>
<td>3.33</td>
</tr>
<tr>
<td>.02</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Time Needed for Testing

Completing the test generally takes a few seconds. However, it may take longer for the display to show start the test. This increased time may be the result of:

- Alcohol still present from a previous test

The results of the test are immediately shown on the display and recorded in the device’s memory for later use in performance monitoring. Any attempt to bypass the system is recorded.

Alcohol in the mouth from any product such as mouthwash, cough medicine, flavoring, etc., may also be indicated on the system. CAUTION: Normal use of these products may show a blood alcohol content; use extreme care when using these products. An immediate blow after using these products could result in a failed test.
Servicing the Vehicle:

The device is designed to be convenient, easy to use and safe. The engineering department is continuously developing features to make the system more convenient.

When your vehicle needs servicing, it will be necessary to take a test whenever the engine is started during the service (remember the five and three minute extendible times).

When leaving your vehicle for servicing, you will need to provide the service personnel with their own mouthpiece, and instructions on how to properly take a test. **CAUTION: Instruct the service personnel not to leave the car running while unattended in case a random rolling retest is required.**

Obtain a copy of the service invoice showing the date, time of service and time of pick-up. All events are recorded in the device’s memory, and you will have proof of the times of vehicle service.

If you have questions or concerns, please contact your service center or Budget IID at 844-551-4883.