

Lifeloc

TECHNOLOGIES



FC5 HORNET

OPERATIONS MANUAL

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The FC5 Hornet is a new generation of alcohol screener for use by schools, police, probation, jails, mining and related testing in safety sensitive industries.

Testing for the presence of alcohol has never been easier. No mouthpieces or special attachments are required. Simple to operate, the FC5 uses icons to eliminate misinterpretation due to language barriers.

The FC5 is alcohol specific and uses a platinum fuel cell providing users with rapid response and reset times, as well as long working life.

The FC5 Hornet comes standard with three operating test modes used for subject, ambient air and open container testing. Designed for safety, the FC5 allows the operator to see the test results without revealing the display to the subject.

Components Diagram



1. **LCD Display:** Displays test order and results with an automatic backlight for day/night visibility
2. **Function Button:** Scrolls through test modes
3. **Power Button:** Turns the unit on or off. Unit will automatically power off after 5 minutes of inactivity
4. **Execute Button:** Allows you to perform functions or trigger a manual override test
5. **Sampling Cone:** Breath should be directed to the cone in order to ensure a proper test
6. **Protective Grip:** Covers and protects the entire unit and any exposed ports
7. **Battery Door:** Holds 4 AA batteries that allow up to 4700 tests

Battery Installation

The FC5 is designed to operate using 4 AA alkaline batteries. Remove the battery door by pressing in and down on the door located on the lower back of the FC5.

Install the 4 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.

In order to change or install batteries, the grip must be removed from the FC5.

Precautions

- Wait at least 10 minutes after drinking, smoking or inserting anything in your mouth before taking a breath test.
- Do not blow smoke into the port as it may damage the sensor.
- Alcohol leaves the body of at a conservative rate of about 0.5 oz. alcohol per hour or .015 percent of blood alcohol content (BAC) per hour. This is an average rate at which the liver can metabolize (burn off) alcohol. The result is that it can take many times longer to sober up than it took to become intoxicated. Someone with a BAC of .16 will require over 10 hours to be completely sober.
- We recommend storing the FC5 in temperatures between 32° - 130° F (0° - 55° C).
- No user serviceable parts inside. To be serviced only by an authorized FC5 technician.

Test Modes Explained

POS+/- NEG Test Mode

Perfect for zero tolerance environments, this test mode displays results as **POS +** or **- NEG** for alcohol.

A **POS +** test is any alcohol level $> .000$ BAC.

Tests are triggered automatically once the subject exhales enough breath towards the collector cone.

Manual override is available using the execute button for testing uncooperative subjects or discrete ambient air.

LEVELS Test Mode

Used for more precise alcohol testing, levels test mode, will alert the operator to levels of alcohol in the subject. Equipped with automatic testing with manual override capabilities for difficult subjects.

Pre-Set Alcohol Levels

Zero: $< .010\%$ BAC ($< .04$ mg/l)

Low: $.011 - .020\%$ BAC ($.05 - .09$ mg/l)

High: $> .021\%$ BAC ($> .100$ mg/l)

OPEN CONTAINER Test Mode

Samples air-space over open drink containers or spills. With its unique double pump action, the Open Container mode ensures sufficient test sample even from small neck bottles. One button sample triggering allows for precise positioning over the sample and the quiet pump action ensures discrete and unobtrusive sampling.

Operations

Getting Started

1. Turn on the FC5 by momentarily pressing the **Power** button. The instrument will initiate a self-test and then display the POS/NEG test mode.
2. To switch test modes, press the **Function** button and scroll through your options.
3. Once a test mode is selected, it will become the new default mode. You can change defaults by momentarily pressing the **Power** button, switching modes using the **Function** button or by completely powering the unit off.
4. You are now ready to test.

Conducting an Automatic Test

1. Position the sampling cone about 4" or 10 cm from the subject's mouth.
2. Instruct the subject to blow steadily towards the cone.
3. The test will automatically trigger once the subject has provided an adequate sample.
4. Read results.
5. Results will stay on the screen for 30 seconds or until you press the **Function** button.

Conducting a Manual Test

1. Position the sampling cone no less than 4" from the subject's mouth.
2. Instruct the subject to blow steadily towards the cone.
3. Once the subject begins blowing, press the **Execute** button to trigger the test.
4. Read results.
5. Results will stay on the screen for 30 seconds or until you press the **Function** button.









Conducting an Open Container Test

1. Position the sampling cone no less than 4" from the container or sample.
2. Press the **Execute** button to trigger the test.
3. Read results.
4. Results will stay on the screen for 30 seconds or until you press the **Function** button.
5. For best results, slightly agitate the sample prior to trigger the test.

Conducting an Ambient Air Test

1. In any of the three modes, wave the unit in the air and press the **Execute** button to trigger the test.
2. Read results.
3. Results will stay on the screen for 30 seconds or until you press the **Function** button.

User Prompts

User Prompts	Cause & Course of Action
POS +/- NEG	POS/NEG Test Mode: NEG results will register as a Zero, POS results will be anything >0.
- NEG	Negative results when in POS/NEG Test Mode.
POS +	Positive result when in POS/NEG Test Mode.
	Levels Test Mode: Results will register in one of three different levels depending on the subjects alcohol content. Zero: <.010% BAC (<.04 mg/l) Low: .011 - .020% BAC (.05 - .09 mg/l) High: >.021% BAC (>.100 mg/l)
	Display shows results as <.010% BAC when in Levels Test Mode.
	Display shows results as .011 - .020% BAC when in Levels Test Mode.
	Display shows results as >.021% BAC when in Levels Test Mode.
	Open Container Test Mode: NEG results will register as a Zero, POS results will be anything >0.
	Negative results when in Open Container Test Mode.
	Positive results when in Open Container Test Mode.
	The hourglass appears when the FC5 is in wait mode. This can occur when the FC5 is recovering from a POS test.

Specifications

Sensor	Electrochemical Fuel Cell
Sampling	Passive
Power Supply	4 AA Batteries
Battery Life	Approx. 4700 tests
Operating Temp.	32°F - 122°F (0°C - 50°C)
Display	High Resolution Graphic Display
Size	1.25" x 2.5" x 5" (31.7 x 63.5 x 127mm)
Weight w/Battery	5oz (142 grams)
Trigger Mode	Automatic and Manual
Warranty	1 year limited warranty

Calibration

All breath testers require periodic calibration to maintain their accuracy. Your FC5 Hornet is designed to be calibrated by a factory certified calibration technician at least once every 12 months. To have your instrument calibrated or serviced email Lifeloc at service@lifeloc.com, visit us at www.lifeloc.com, call 1.800.722.4872 or contact your local distributor.

Service & Maintenance

For general maintenance we recommend wiping the unit off with a soft cloth sprayed with a non-abrasive disinfectant cleaner. To obtain the longest life from your FC5 Hornet, it is recommended that two or three tests be taken at least every 30 days. This prevents the fuel cell from drying out over extended periods of non use. If you require service, email us at service@lifeloc.com, call 1.800.722.4872 or contact your local distributor.

Warranty

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

Warranty Continued

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

Warranty Continued

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.

Warranty Continued

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 Lifeloc Equipment purchased from and after [September 1, 2014]. Rights and recourse may vary by country.

Fuel Cell Warranty*

Unless otherwise set forth in the applicable purchase agreement, Lifeloc warrants to the original purchaser of Lifeloc breath alcohol testers that the fuel cell purchased with the instrument shall operate without defect for the life of the instrument subject to the following conditions:

- 1) Lifeloc shall, at its option, elect to repair or replace any fuel cell returned to Lifeloc as defective.
- 2) All fuel cells returned to Lifeloc as defective become the property of Lifeloc.
- 3) Warranty applies only to fuel cells purchased with new instruments after June 1, 2014.
- 4) Warranty is valid only to the original purchaser of an instrument. Warranty does not pass to subsequent users if the instrument is resold, stolen, donated or given to anyone other than the original purchaser.
- 5) Warranty is invalidated if, in the opinion of Lifeloc, the instrument has been misused, abused, modified or improperly maintained. Lifeloc shall conduct its normal billable Factory Diagnostic Test on all instruments submitted for Lifeloc Limited Lifetime Fuel Cell Warranty evaluation prior to acceptance by Lifeloc of the Lifeloc Limited Lifetime Fuel Cell Warranty claim.
- 6) The Lifeloc Limited Fuel Cell Warranty does not apply if the product has been repaired or modified by someone other than a Lifeloc factory authorized technician and/or if parts other than Lifeloc approved parts are used in replacement or repair;

Fuel Cell Warranty Continued

or if any Lifeloc serial number has been removed or defaced.

- 7) Upon subsequent instrument trade-in, there shall be no residual monetary value associated with the fuel cell owing to the owner.
- 8) The Lifeloc Limited Fuel Cell Warranty does not survive past the end-of service and support life of the instrument as determined by Lifeloc Technologies in its sole discretion.
- 9) Other than as set forth above, all Lifeloc fuel cells are subject to Lifeloc's standard Warranty.

*Lifetime fuel cell warranty is valid throughout the US and Canada. International Customers please contact Lifeloc directly for specific terms and conditions.