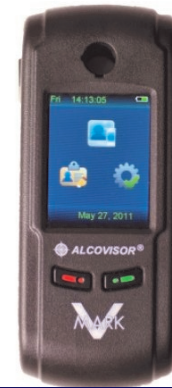




EV30

Designed expressly for Workplace testing, the EV30 is simple to learn and easy to use. Fast, rugged and affordable, no other entry-level breath tester can compare.



MARK V

A basic alcohol tester for use in various segments. Operating system is not specific or optimized for evidential DOT testing.

COMPANY PROFILES

Lifeloc Technologies Snapshot

Founded in 1983 in Wheat Ridge, Colorado. Public Company. American manufacturer. First breath alcohol testers shipped into the DOT marketplace in 1988. ISO 9001:2008 certified. Other breathalyzer brands include Phoenix, Phoenix 6.0BT, FC5, FC10, FC10^{plus}, FC20, LifeGuard. Sells through approximately 25 Lifeloc Master Trainers and approved distributors in North America. www.lifeloc.com. Email: Info@Lifeloc.com.

Well Electric Company Snapshot

Founded in 1996. Chinese manufacturer. Private Company. Manufacturer of breath alcohol testers since 2003. ISO9001:2000 certified. Other breathalyzer brands include Jupiter, Mars, Mercury, Pluto, Saturn. <http://www.well-co.com/index.html>. Email: cschina@well-co.com.





*Alcovisor is a trademark of the ShenZhen Well Electric Company Ltd., ShenZhen, China and is not affiliated with Lifeloc Technologies. Comparisons and information in this document reflect tests conducted by Lifeloc Technologies and information gleaned from Mark V Alcovisor product manuals or websites. Opinions expressed in this document are those of Lifeloc only and were prepared in our normal course of competitive evaluation. We recommend buyers and users always do their own research to be fully informed when purchasing Evidential Breath Alcohol Testers. Copyright Lifeloc Technologies 2013.

PRINTING CAPABILITIES

Both the EV30 and the Mark V are available with DOT test result printers as required for evidential breath alcohol testing. Lifeloc markets a rugged, feature rich mobile thermal printer selected to meet the challenging demands of workplace breath testing. The Lifeloc printer is UL listed and approved to IP54 standards for dust and water exposure. It is rated to withstand multiple drops from 1.2 meters. The Mark V is neither UL listed and would not pass IP54 standards in its current form. Both use Lithium-ion batteries of similar voltage, however the EV30 printer battery is totally encased in a plastic housing to prevent hazards while the Mark V battery is foil and paper wrapped. The Mark V requires a separate battery charger while the Lifeloc printer can be charged without removal from the printer, even while the printer is being used.

The DOT requires up to five years record retention for test results. Lifeloc Thermalast printer rolls have been rated up to 20 years in a normal office environments. Mark V printer paper is commercial grade receipt paper and does not carry any archival rating. Users risk long term image deterioration, discoloration or fading with less expensive grades of thermal paper.

The Mark V printer while small, contains a roll size of less than 20 feet of paper. The Lifeloc printer roll size is approximately 60 feet providing up to three times as many test results. Low paper and battery conditions are indicated by the Lifeloc printer while no advance warning is given on the Mark V device. If battery power is exhausted on the Mark V printer, the printer simply won't turn on or stops functioning.

	EV30	MARK V
Low Paper Indicator		
Paper End Sensor		
IP54 Drop Test Rating for Impact Resistance		
Power On Light		
Battery Power Indicator		
UL Listed		
Simple recharge, no battery removal or extra components		
Shoulder Strap & Belt Clip		

PRINTING CAPABILITIES



1. Battery Indicator
2. Power Button
3. Charge Status
4. Feed Button
5. Push Button Paper Loader
6. Error Light



MEASURING UP

Did you know that *one* roll of Lifeloc Thermalast Paper is equivalent to more than 3 rolls of paper from the Mark V?



COMPLIANCE

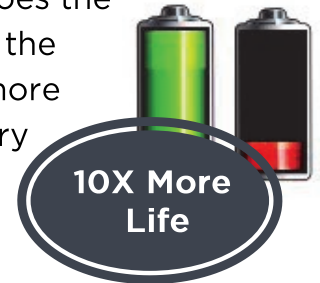


The most important aspect of any alcohol testing program is compliance. Make sure your instrument is working for you and not against you especially when your reputation and someone’s livelihood is on the line. Inexperienced or infrequent testing administrators frequently fail to follow correct DOT test protocols. Your software can make a big difference in your success. Here are several examples:

	Mark V	EV30
Factory Settings	Any user can access and change advanced settings such as unit of measure, breath to blood ratio, and breath pressure. This invites Inadvertent setting changes which can call test results into question.	All advanced settings are set at the factory and cannot be tampered with in the field protecting test results from being called into question.
Calibration	Mark V does not measure gas flow and can calibrate and cal-check on dry air or empty gas tanks. This can lead to bad calibration and cal-checks. Since the Mark V QAP does not require trained Calibration Technicians the risks are even higher.	The EV30 checks the fuel cell signal to ensure sample reaches the chamber preventing an inaccurate calibration. Additionally, the EV30 prompts users with a countdown so you know when to press the gas and when to release. Unlike the Mark V Lifeloc includes full calibration certification as part of our operator training.
Air Blank	The Mark V will allow users to take a test even after a failed air blank. Per the DOT any confirmation test taken after a failed air blank will be rendered invalid.	The EV30 does not permit users to take a test after a failed air blank. The unit will immediately return users to the air blank screen. No testing is permitted until there is a valid air blank result.

BATTERY LIFE

The Mark V tester does not have a battery status indicator as does the EV30. If power is drained on the Mark V you will not know until the device ceases working or will not test. The EV30 provides for more than 10 times the number of tests (6,000 VS 500) before battery recharging or replacement is required and you will always know when power is low due to the real-time power indicator on the EV30



HYGIENE

Lifeloc Technologies provides you with the safest, most hygienic instruments in the industry

Anti-Microbial Cases:

Using Silver Ion Technology from BioMaster, the EV30 antimicrobial cases provides around the clock protection from cross contamination and bacteria due to saliva residue. Highly active and durable, the antimicrobial properties are dispersed throughout the entire case preventing bacteria from producing or developing resistance.

Safe: Silver Ion Technology

Effective: 99.85% Effective against E Coli and 95.55% Effective against Staph

Permanent: Lasts for the life of your unit, will not wash or rub off.

EasyTab™ Ejectable Mouthpiece:

Good hygiene requires that a test administrator should not have to manually remove a used mouthpiece by having to touch the “wet” end of the mouthpiece. This is unavoidable with the Mark V design and we recommend MARK V users always wear gloves, use a protective tissue or the remains of the mouthpiece wrapper to remove a spent mouthpiece. Lifeloc takes user hygiene seriously. All Lifeloc Mouthpieces feature our EasyTab mouthpiece ejector which prevents the operator having to touch the “wet” end of a used mouthpiece. As an additional safeguard, our mouthpieces channel breath flow away from the operator for user comfort and good hygiene.



MOUTHPIECE DESIGN

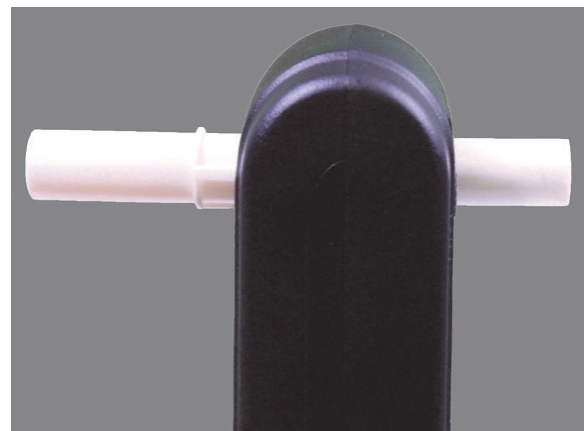
If a mouthpiece can be affixed incorrectly it will happen. The Mark V has a unique design that permits a mouthpiece to be inserted directly into the front (the display side) or into the back of the device. Intended to offer operator flexibility this design actually increases the chances of error. On the Mark V there is no design safeguard to prevent the mouthpiece from being inserted backwards into either side of the device. Further, the guides engineered into the mouthpiece do not prevent the mouthpiece from being seated improperly into the tester even if inserted correctly.

There are three possible ways to insert the mouthpiece into either side of the Mark V. Only one way on each side is correct. Busy test administrators or those who test infrequently have the greatest risk of inadvertently or carelessly incorrectly affixing a mouthpiece. If this occurs a new sterile mouthpiece may be required. At worst the operator will unknowingly get a failed test or even a false negative.

On the EV30 one side of the mouthpiece is flat, unlike the completely circular Mark V mouthpiece, making it impossible to load a mouthpiece incorrectly. The EV30 mouthpiece also includes a patented eject mechanism to make hygienic “dry” removal easy.



Correct: Mouthpiece allows for air to be directed into the port holes



Misaligned: In this position, the port holes are covered allowing no breath into the unit.

ACCURACY & RESPONSE TIME

Time is money and you want to have the fastest equipment possible when testing onsite or for large groups. Not only is speed a factor but with mobile testing you need to ensure that your unit is capable of working across both hot and cold temperatures with the same degree of accuracy and speed. You don't have the time to wait around for your unit to warm up or cool down.



The Lifeloc EV30 is built for rapid repeatability with response times that are under 10 seconds on a positive and a recovery time of less than 30 seconds. This far exceeds that of the MARK V. Per the MARK V user manual, if the BAC is higher than zero, you must wait 3 minutes before performing the next test. This is an extremely long wait time.

Of greater concern is the fact that unlike the EV30 the Mark V allows users to continue testing before the unit fully recovers from its three minute wait. This could lead to false positive results when testing. Unlike the EV30, the Mark V provides no timers or indications of when the unit has fully recovered.

In cold temperatures, the MARK V takes a considerable amount of time to calculate results leaving the user no indication as to what is happening. The unit appears as if it's locked up. This could be a point of pain for mobile testers. All evidential breath testing units have an operating temperature range to ensure accurate testing. Unlike the Mark V the EV30 will not allow for testing to be performed if the unit is outside of its temperature range.

TRAINING

The Lifeloc Training Network consists of approx. 25 highly experienced substance abuse training professionals, conveniently located throughout the US. All are certified Lifeloc Master Trainers and most hold additional professional certifications such as C-SAPA.

This provides the flexibility for both online and in-person training.

RUGGED CONSTRUCTION

Breath alcohol testers may fail for different reasons. Over many years of use, fuel cells may require replacement. While many manufacturers have moved to smaller fuel cells to reduce cost (the Mark V uses a ½" diameter fuel cell, Lifeloc uses a 1" diameter fuel cell) Lifeloc has resisted doing the same because our reputation is built on ease of use, reliability and long working life.



	Mark V	EV30
Instrument		
Protective grip	No	Yes
IEC standards for:		
Drop	No	Yes
Shock	No	Yes
Vibration	No	Yes
Instrument Case		
Water Proof	No	Yes
Dust proof	No	Yes
Crush Resistant	No	Yes
Pad Lockable	No	Yes
Printer		
IP54 Ingress Rating	No	Yes
Protective case corners	No	Yes
Drop test rated 1.2 meters	No	Yes
Shoulder Strap for mobile use	No	Yes
Optional belt clip	No	Yes

Feature Summary

Quality	EV30	MARK V
Fuel Cell Size	1"	1/2"
Battery	4 AA or NiMH	4 AAA
Battery Life	6000 Test	500 Test
≤10 sec. response time	Yes	Yes
≤30 sec. recovery time	Yes	Up to 3 minutes
Weight	8 oz.	7 oz.
Warranty: On All System Components	Yes	No
Computer Interface	Yes	Yes
Printers	Thermal	Thermal
Thermal Paper	Thermalast 20 Yr Image Life	Standard Receipt Paper
Anti-Microbial Case	Yes	None
Meets IEC Drop Test Standards	Yes	None
Meets IEC Vibration Test Standards	Yes	None
Waterproof, Rugged, Crush Proof Equipment Case	Yes	Limited
Protective Grip	Yes	None
Country of Origin	USA	China
Ease of Use		
Battery Status Indicators and Warnings	Yes	Yes
Adjustable LCD Contrast	Yes	None
Displays Breath Flow Graph of Alcohol Levels	Yes	None
Audible Testing Cues	Yes	Yes
EasyTab Ejectable Mouthpiece	Yes	None
Password Protection	User Controlled	Forced Multiple Levels
Displays Breath Flow Volume in Liters while Blowing	Yes	None
Adjustable Auto Shut-Off	Yes	Yes
Data Input Fields	Yes	None
Easy, Secure Calibration	Yes	None
Onboard Barometric Pressure Sensor	Optional	None
Compliance		
DOT/NHTSA Approved	Yes	Yes
Temperature Lockout if outside of the operating temperature range	Yes	None
Automatic Air Blank	Yes	Yes
Three Test Modes	Yes	Yes
Pressure Sensitive Testing provides protection against an uncooperative subject	Yes	None
Operating Temp	0°C -55°C or 32°F - 130°F	-5°C -55°C or 23°F - 130°F
Cal/Cal Check Reminders by Test, Time or Both	Yes	None
Cal/Cal Check Lockout by Test, Time or Both	Yes	Yes
Prevents Calibration on Empty Tank or Air	Yes	None
Protects critical instrument settings (Partition Ratio, Unit of Measure)	Yes	None
Prevents tests after a failed air blank	Yes	None