What is an Electronic Logging Device?

Electronic logging device (ELD) means a device or technology that automatically records a driver’s driving time and facilitates the accurate recording of the driver’s hours of service, and that meets the requirements of CFR title 49 Part 395 Subpart B.

The FMCSA began allowing carriers to electronically track a driver’s hours of service time in 1988, but the technology in 1988 was limited in nature. The 1988 technology is known as an Automatic On-Board Recording Device (AOBRD.) Many carriers voluntarily adopted AOBRDs into their operations, and have found great success in using the devices. The 2015 rule making addresses advancements in technology. There are many similarities in how an AOBRD and an ELD operate, but there are also significant differences.

How are computers/tablets/smartphones ELDs and AOBRDs different?

Until December 16, 2017 computers, tablets and smart phones can be used to create a logbook, but they are not connected to the truck. If one of these devices are used to create a logbook, the log page needs to be signed electronically and printed at the time of an inspection, or printed each day and signed by hand (See 395.8 interpretation 28 for details.)

ELDs and AOBRDs look very similar because they are connected to the truck, and many times can even use the same hardware. They appear to function the same, but the differences are in the details.

Here are some of the details on how an ELD is different from a AOBRD.

ELDs must be able to transfer data using either a wireless method (E-mail and wireless web service) or a local method (Bluetooth and USB). The data set for the transfer must be standardized, so that transfers from every device are the same.

ELDs must print or display a graph grid similar to the grid used in a driver’s paper log book. If the ELD uses a display rather than printing the grid and other required information, then the device has to be reasonably accessible to law enforcement without having to enter the cab of the vehicle.

ELDs must automatically record the following data elements at certain intervals: date, time, location information, engine hours, vehicle miles, and identification information for the driver, the authenticated user, the vehicle, and the motor carrier. The rule does not require precise location tracking information, and sets forward requirements for accuracy standards related to location information.

ELDs must have a mute function if there are audible alerts incorporated into the device.

ELDs must be set up so that carriers and drivers cannot alter or erase information collected by the device.

ELDs have several other firmware specific functions that an AOBRD does not. Compare 395.15 to 395 sub-part B for more detail.
Electronic Logging Devices (ELD)

On December 16, 2015 the Federal Motor Carrier Safety Administration (FMCSA) issued a final rule creating a new type of electronic time tracking system for motor carriers. The rule mandates the use of the devices for many commercial motor carriers who operate Commercial Motor Vehicles (CMVs) over 10,000 pounds. The rule requires all motor carriers who are currently using log books to comply with the maximum driving time rules in 395.3 and 395.5 to have ELDs installed and operational in all vehicles by December 17, 2017. Carriers that are currently using Automatic On-Board Recording Devices (AOBRDs) have until December 17, 2019 to have ELDs installed and operational.

Who has to use ELDs?

Most carriers will have to install ELDs in their trucks to track compliance with the FMCSA’s Hours of Service Rules (HOS). However, there are several exceptions to the requirement:

- Drivers operating vehicles that were manufactured before model year 2000.
- Drivers operating vehicles that are being driven as the power unit in a drive-away/tow-away operation.
- Drivers who are not required to use a log-book for more than 8 days in any 30 day period. (This would affect drivers that use local exemptions such as the 100 or 150 air mile radius rules, but occasionally have to run a log book.)
- Drivers of vehicles that meet the definition of a “Covered Farm Vehicle” (see CFR 49 390.2 for the definition.)
- Drivers of vehicles that meet the definition of a “Utility Service Vehicle” (see CFR 49 390.2 for the definition.)

REFERENCES:

1) Federal Motor Carrier Regulations, Title 49 Parts 390, 395
2) CVSA 2015 ELD Final Rule Summary

RELATED AGENCIES:

COLORADO STATE PATROL
15075 South Golden Road, Golden, CO 80401
(303) 273-1875
www.colorado.gov or search for Colorado State Patrol

FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION
12300 W. Dakota Ave. #130, Lakewood, CO 80228
(720) 963-3130
www.fmcsa.dot.gov

This pamphlet is intended only as an informational guide to assist commercial carriers and drivers with understanding the recent changes to the hours of service rules in the Federal Regulations. It does not cover all the laws required to be in compliance. All reference to the State and Federal Regulations should be confirmed using the Colorado Revised Statutes and Title 49 Code of Federal Regulations. Photos are used as a graphic representation and should not be considered to be an endorsement for any particular product or service.