

Differences between AOBRDs and ELDs

1. What are the differences in the technical specifications in the 1988 automatic onboard recording device (AOBRD) Rule (49 CFR 395.15) and the Electronic Logging Device (ELD) rule?

The table below compares the technical specifications in the AOBRD rule (49 CFR 395.15) and the ELD rule.

Feature/Function	1988 AOBRD Rule	ELD Rule
Integral Synchronization	Integral synchronization required, but term not defined in the Federal Motor Carrier Safety Regulations (FMCSRs).	Integral synchronization interfacing with the CMV engine electronic control module (ECM), to automatically capture engine power status, vehicle motion status, miles driven, engine hours. (CMVs older than model year 2000 exempted.)
Recording Location Information of Commercial Motor Vehicle (CMV)	Required at each change of duty status. Manual or automated.	Requires automated entry at each change of duty status, at 60-minute intervals while CMV is in motion, at engine-on and engine-off instances, and at beginning and end of personal use and yard moves.
Graph Grid Display	Not required – “time and sequence of duty status changes.”	An ELD must be able to present a graph grid of driver’s daily duty status changes either on a display or on a printout.
Hours of Service (HOS) Driver Advisory Messages	Not addressed.	HOS limits notification is not required. “Unassigned driving time/miles” warning must be provided upon login.
Device “Default” Duty Status	Not addressed.	On-duty not driving status, when CMV has not been in-motion for five consecutive minutes, and driver has not responded to an ELD prompt within one minute. No other non-driver-initiated status change is allowed.
Clock Time Drift	Not addressed.	ELD time must be synchronized to Universal Coordinated Time (UTC); absolute deviation must not exceed 10 minutes at any time.
Communications Methods	Not addressed – focused on interface between AOBRD support systems and printers.	Two Options: 1- “Telematics”: As a minimum, the ELD must transfer data via both wireless Web services and wireless e-mail. 2- “Local Transfer”: As a minimum, the ELD must transfer data via both USB 2.0 and Bluetooth. Both types of ELDs must be capable of displaying a standardized ELD data set to authorized safety officials via display or printout.
Resistance to Tampering	AOBRD and support systems must be tamperproof, to the maximum extent practical.	An ELD must not permit alteration or erasure of the original information collected concerning the driver’s ELD records or alteration of the source data streams used to provide that information. ELD must support data integrity check functions.
Identification of Sensor Failures and Edited Data	AOBRD must identify sensor failures and edited data.	An ELD must have the capability to monitor its compliance (engine connectivity, timing, positioning, etc.) for detectable malfunctions and data inconsistencies. An ELD must record these occurrences.

