BEFORE USING THE ELD

Swipe down from the top of the screen and make sure Wi-Fi (or cellular connection), Location and Bluetooth are enabled.

Go to Settings / Privacy / Location and make sure “Locating method” is set to (high accuracy) GPS, Wi-Fi and mobile networks.

INTRODUCTION AND COMPLIANCE

The latest HOS Mobile APP, released on the first half of 2015, is compliant with US Federal FMCSA title 49 part 395 AOBRD 395.15, 395.16 and the ELD mandate final rule. There is Certification menu option that indicates that the mobile APP, mobile device used were self-certified according to federal requirement.

 Regulations the mobile APP is compliant with:
- 60-hour/7 days or 70-hour/8 days Rules
- 34-hour week restart with latest suspension of two periods 1-5am
- 11 hours driving for the day
- 14 hours on duty for the day
- Sleeper Berth, Passenger Seat and Personal Conveyance (Use) provisions
- 30 minutes break provision
- Canada Cycle 1 and 2 Regulations
- Location recording for vehicle’s engine turned on and off, and location recording every 60 minutes if vehicle is moving
- Mobile device permits duty status changes only when the vehicle is at rest
- The mobile device warns the driver, visually and/or audibly of any malfunction
- When the vehicle is stationary for 5 minutes or more, the mobile device will default to on-duty not driving, and the driver must enter the proper status
- The mobile device (ELD) performs self-test, as well as a self-test at any point upon request of an authorized safety assurance official.

The HOS Mobile APP is not compliant with (exclusions):
- States of Hawaii and Alaska
**SUPPORT PERSONNEL**

ELD Complete supports multiple ECM-linked devices including wireless and wired hardware. For wired devices (e.g. Suntech ST20, CalAmp LMU4230, CalAmp VeoSphere) the tablet must be plugged to the ECM-linked device at all times in order to read required ECM data.

*For the ELD to properly read required engine data, the vehicle’s engine must be turned on and running.* Please, wait for about 10 seconds, after turning the engine on, for the engine data to be available.

When an ELD is installed the first time, support personnel must do the initial configuration and diagnostic of the ELD.

**Bluetooth discovery and pairing. ELD Diagnostic**

From the login screen select the Support option from the menu (top right corner). The support personnel will scan for ECM-Link devices. Bluetooth must be enabled on the phone/tablet. In order to help you identify the ECM-linked device you need to connect to, some vehicles are equipped with a small decal showing the ECM-linked device ID:

On the ELD, select the ECM-linked device’s ID showing on the dashboard’s decal (if vehicle equipped with decal). Once the ECM-Link device shows in the screen, tap on it and a diagnostic will be performed on the ELD to make sure all necessary functionality is available. Once the diagnostic passes, the ELD is ready for driver operation. In order for the ELD to be compliant several parameters must be acquired from the vehicle’s Engine Control Module (ECM) and other internal systems must be verified.

**FMCSA REGISTRATION**

As a substitution to an exterior faceplate, a “Certification” menu item will display the certification image as evidence that the mobile device has been tested, certified and approved as meeting the performance requirements. Roadside inspection agent will find the FMCSA registration under

*Device name: ELD Complete  Model Number: ELD-2000*

**ACCOUNT TYPES**

*Driver:* Unique, per-driver account used by drivers under 49 CFR Parts 385, 386, 390, and 395 regulations (hereon HOS). This account records duty status changes (RODS) and allows the export of driver’s records for display, print and agent output file generation.

*Support:* Account used by the carrier and ELD manufacturer to setup, configure, update and troubleshoot the ELD. No duty status changes are recorded with this account and no access to driver’s record of duty status changes is permitted under the support account.

*Non-authenticated:* All operation of a commercial motor vehicle (CMV) is recorded under this account (a.k.a Unidentified Driver) if no driver has logged into the ELD. Non-authenticated records (vehicle movement and on-duty time) are stored on the ELD as well as the carrier and should be assumed by a driver account.
During the diagnostic, the mobile APP will begin collecting the necessary engine data. Support personnel can only release the ELD for driver use after all ELD diagnostics were successfully performed:

**Driver's login unlock.** In an event the driver is still logged on a device but the device ceased to function or gets lost, the driver must call the home base carrier and ask for his login name to be unlocked. The unlock process will change the driver’s status to off duty at the time the driver solicited the login unlock.

**VEHICLE PROFILE**

Before driver’s logs can be exported and shared with an authorized agent, the driver must update the correct vehicle’s information. Please tap on the truck or trailer image to pick from the asset list downloaded during login (see list below) or to manually enter (if allowed) a new truck or trailer.

Once you select a tractor or trailer from the downloaded list the ELD will always use the VIN number, license plate and registration state displayed on the list.

You can also add a new tractor or trailer (if allowed by your carrier) by selecting the + button located on the top right of the screen:

**Bluetooth and ECM connection status:** The ELD must be able to read engine data at all times. Make sure the Bluetooth and ECM connection indicators remains green. If indicator turns red, please go to Scan Devices and connect to the ECM-linked device.

**DRIVER LOGIN**

Each driver using the system will have a unique login ID. This login name and password is for the specific driver’s use only and must not be shared with any other person (driver or not). The login name belongs to the driver and is linked to the driver’s personal information (e.g. driver’s license, etcetera). If the driver changes carrier and is now driving for a different carrier, the login name will remain the same and is the driver’s obligation to ask the home base carrier to update carrier name and DOT number on the system.

The driver is restricted to be logged on to only one mobile device at any time. In order for the driver to logon on a different mobile device, the driver must change to off duty status and logout from the previous device.
Team drivers: Up to two drivers are allowed to log on the same mobile device. Records and logs are generated for each independent driver showing the other driver as co-driver. To logon a second driver just tap on the name of the currently logged driver on the APP’s Principal screen.

CREATING SHIPMENTS
The driver should create a shipment on the mobile APP. Please select the option “Shipment” from the menu. Make sure you enter the correct shipment’s pick-up and delivery time, as well as the shipper name, shipment number and the commodity you are transporting. The information provided here must match the driver’s supporting documents. See the Shipment Sync session to stay connected with shippers/receivers and get instant notifications on: final arrival time, bay number, safe parking and more.

ASSUMPTION OF UNIDENTIFIED RECORDS
The ELD is designed to record all vehicle movements and stop time during movements on an un-authenticated account. Please, during the login process, accept the unidentified records that belong to you by tapping on the checkboxes and then selecting “Accept selected records”.

DRIVER PROFILE AND TEAM DRIVERS

We recommend to verify the driver’s profile. Please make sure the information is correct: carrier name, your rule set (60-hour or 70-hour) and the home base time zone.

Select the ruleset drop-down to change rule set from 60h to 70h and vice versa.

Select the units of measurement (miles, gallons, kilometers or liters)

Starting 24h time is set by your carrier but could be changed at anytime. Just keep in mind that the new 24h starting time will take effect on your next cycle (after the 34h restart).
The mobile APP also keeps track of possible violations under the “Remaining” session. Please tap on any of the following duty status:

- **ON** — on duty status
- **D** — driving status
- **SB** — sleeper berth
- **PS** — passenger seat
- **Personal** — for personal conveyance (use)
- **OFF** — off duty status

The “automatic switch to Driving using location services” allows you to automatically enter Driving status using your current location in cases where data from the vehicle’s engine is not available. Please, remember to turn this feature off if you are bringing the ELD device with you during off time.

**REMAINING TIMES**

The mobile APP automatically calculates the different times at which a violation will take place. The time spent on the current duty status is also shown (on this picture: 100 hours and 16 minutes).
REVIEWING, EDITING, EXPORTING AND CERTIFYING DRIVER LOGS
Every duty status change must be certified before exporting the driver’s logs. Select the “Certify Logs” option from the menu to list all unverified logs. Select each day and tap on the “Certify” button. At the end of each 24-hour period, the ELD will automatically prompt the driver to certify logs for the last 24 hours period. During driver login and logout, the driver will be prompted to certify the logs.

To view your Logbook, edit your logs or export Logs/ELD data file, go to the “Logbook” option in the menu.

You can move to a different day by selecting the left and right arrows:

The Logbook tab shows the logbook for the selected day and the Logs tab has a list with all the logs for that day where you can edit an existing log. You can use the mobile device’s swipe option to move between the Logbook and the Logs tabs:

Adding, deleting and editing an existing record (log): On the Logs tab select the edit icon. Make the necessary changes, input the mandatory remark explaining the reason of the change and then Confirm Changes. Remember, driving time can only be increased, on automatically recorded records; and deleted, reduced or increased on manually recorded records! Your ELD must be synchronized to your tractor’s ECU (via ECM device). Failure to read engine values will make you non-compliant.

Daily ON-DUTY, cycle ON-DUTY and possible violations will be calculated according to the new record change.
CARRIER-PROPOSED LOG EDITS

If carrier personnel add, delete or edit a duty status record, you as a driver must ultimately assume or reject the carrier’s suggestion.

Carrier-proposed edits will show on your ELD at different times. They will show during login and logout process and they will also be shown as a new ELD message on the main screen:

Please make sure:
- You are not driving while attending to carrier-proposed log edits
- You re-certify your ELD records if a carrier-proposed log edit is assumed

Once you tap on the ELD message button a list of carrier-proposed log changes will be shown:

In general, blue entries are existing logs edits, green are carrier added logs and entries in red are carrier deleted logs.

You can either Reject or Accept (Assume) the changed logs. Keep in mind that the action is applied to the entries that were selected. For instance, if the carrier made 5 different changes and you want to accept all of them but one, it is much easier to tap on the checkbox for the entry you don’t want to accept then select the Reject button.

select the logs you want to assume OR reject
LOGBOOK AND EXPORTING DRIVER LOGS

You can generate a chart with your logs at any time. Tap on the “Logbook” option from the menu. Use the right/left buttons to select a different day.

If an authorized federal agent requests to see the driver’s logs, select the option “Export ELD Data File” from the Logbook menu. The Driver Logs file is automatically created in directory “HOSFolder” inside the mobile device internal storage.

There are 3 different methods to export the ELD data file to the authority:
- **FMCSA webservice**
- Email to authorized federal agent and
- **USB export to FMCSA’s provided memory stick**

Please use the appropriate USB cable to connect the mobile device to the federal agent’s computer/laptop or to USB memory stick (A-type). You can also email the “ELD Data File” to an email given to you by the authorized agent. Please, use your email mobile app of preference taking into consideration that the data file is in HOSFolder. The data file is the only CSV file located in the HOSFolder.

You can also display or print the Logbook by selecting “Print-Display Logs” option. In this case, you can print the PDF file saved on the HOSFolder.

The first option (left most) is to save the ELD data file locally on your phone/device. The data file is the only CSV file located in the HOSFolder inside internal storage. Please download a CSV viewer (e.g. CSV Viewer). Once you export the ELD data file and it’s opened by CSV Viewer, select share and pick your preferred email client. Ask the roadside inspection agent for the destination email address and send the email with the attached ELD data file.

The second option is used during roadside inspection and the ELD data file is saved on the **DOT external storage device**. A validation is first made to confirm that the attached external storage is a valid, FMCSA-defined, device. The third option is to send the ELD data file to **FMCSA’s public web service**. Once selected, enter a Remark (sometimes this remark is provided by the roadside agent). A submission status message is shown after the ELD Data File is submitted. If no errors were found, take note of the Submission ID and share it with the roadside agent. Errors are shown if returned by FMCSA’s webservice. Please take appropriate action and resend.

**You need to carry an On-The-Go (OTG) USB adapter to insert the agent’s external memory.** Insert the micro-USB into your phone/tablet and the memory stick into the other end before exporting the ELD data file.
ADVERSE CONDITIONS
Adverse Condition - FMCSA Definition
The FMCSA defines adverse driving conditions as: “snow, sleet, fog, other adverse weather conditions, a highway covered with snow or ice, or unusual road and traffic conditions, none of which were apparent on the basis of information known to the person dispatching the run at the time it was begun.” So, while this may include an unexpected snowstorm or a traffic delay due to a crash, it doesn’t include time sitting in traffic due to normal, rush hour congestion.
If any of the conditions described above exist, you may continue driving until the intended destination is reached or until you are able to safely reach a secure location, but for no more than two extra hours. Motor carriers cannot drive more than 11 hours during a 14-hour period. This means that you may drive up to 13 hours in adverse conditions. It’s important to note that the adverse conditions exemption only applies to driving time. This means that no matter what conditions exist, property motor carriers cannot drive after having been on duty for 14 consecutive hours

DOT INSPECTION BUTTON (ELD LOCK)
If you are stopped by a roadside agent, select the DOT Inspection button on the bottom right corner (main screen).
If you want to have your Logbooks ready, for the last 8 days, select PRINT-DISPLAY LOGS and a PDF will be created including information for the last 8 days. IMPORTANT NOTE: The ELD is locked at this moment and the driver must re-enter his/her password in order to unlock the ELD!
The certification information is also shown on the DOT Inspection screen:

Use one of the three different methods to export the ELD data file by tapping on EXPORT ELD DATA FILE:
- FMCSA webservice
- Email to authorized federal/local agent
- USB export to FMCSA’s provided USB memory stick
The first option is to send the ELD data file to FMCSA’s public web service. Once selected, enter a Remark (sometimes this remark is provided by the roadside agent). A submission status message is shown after the ELD Data File is submitted. If no errors were found, take note of the Submission ID and share it with the roadside agent. Errors are shown if returned by FMCSA’s webservice. Please take appropriate action and resend. To send the eRODS via email, tap on the email option, enter the destination email address and send.

CREATING ANNOTATIONS
The driver can create annotations in order to note changes to previous status. To create an annotation: tap on the “Logs” option in the menu. Tap on the annotation icon for the log you want to add an annotation to. Enter a text explaining the annotation. To view existing annotations: Tap on the “Annotations” option in the Principal’s screen menu.
The Adverse Conditions button is disabled automatically once the driver takes the 10 hours of OFF-Duty time (USA) or the end of a 24-hour period (Canada).

**HOURS RECAP**

You can now tap on the “ON-Cycle (see recap)” donut to see how much ON-Duty time will be removed once the 7th or 8th day is reached. The recap summary message also tells you the day and time when the next available recap will take place. This is information has great value for the driver, so you can plan your weekly cycle and be aware of how much time you will get back each day, after the 7th or 8th day (according to the currently selected ruleset).

**SHIPMENT SYNC**

You can now stay connected with your dispatcher and shipper/receiver warehouses to receive instant notifications on:

- Final arrival time as scheduled by the shipper or receiver’s warehouse
- Bay number assigned for pickup or delivery
- Recommended safe parking
- Additional notes

Create your shipment as defined on page 7:

Ask your dispatcher to share your shipment information with the warehouses. Once warehouse personnel assigns you the final arrival time, bay number, safe parking, etcetera you will receive an instant notification on your ELD.
**DETAILED MALFUNCTION/DIAGNOSTIC CODES**

**DIAGNOSTICS:**
1. Power Data Diagnostic (ECM parameters must be available within 1 minute of powering the vehicle's engine on)
   
   Resolution: Make sure you are connected to the ECM device. On the menu, go to Scan Devices and select your ECM device. Make sure the diagnostic passes all engine parameters (all green)

2. Engine Synchronization Data Diagnostic (not all ECM parameters are available when the ELD records an event e.g. duty status change)
   
   Resolution: Make sure you are connected to the ECM device. On the menu, go to Scan Devices and select your ECM device. Make sure the diagnostic passes all engine parameters (all green)

3. Missing Required Data Elements Data Diagnostic (other required data e.g. location, coordinates) not available when recording an event
   
   Resolution: Make sure GPS module is enabled on your ELD

4. Unidentified Driving Records Data Diagnostic (more than 30 minutes of driving without a driver logged on the ELD)
   
   Resolution: You are not logged on the ELD and vehicle move for an extended period of time. Please login and select your Driving time

**MALFUNCTIONS** (most malfunctions relate to a Diagnostic, but a malfunction is generated when the same diagnostic occurs for at least 30 minutes in the last 24 hours):

**P-** Power Compliance (related to diagnostic 1)

**E-** Engine Synchronization Compliance (related to diagnostic 2, for instance multiple periods of no ECM data that, when added together are more than 30 minutes in the last 24 hours)

**T-** Timing Compliance (the time on the ELD, compared to an external time source are different)

Resolution: Make sure the date and time on your mobile device is properly set. DO NOT (manually) change the date or the time on your ELD

**L-** Positioning Compliance (no location available, (related to diagnostic 1)

**R-** Data Recording Compliance (monitor storage capability to store records)

Resolution: Make sure you have sufficient internal storage on your ELD. Delete files if necessary

**S-** Data Transfer Compliance (ELD records not able to be uploaded)

Resolution: You probably don’t have internet access. Restart the ELD (if needed) and confirm you reconnect to the network

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**LIST OF SUPPORTED ENGINE SYNCHRONIZATION (ECM) DEVICES**

- apollo Interpreter
- A-Track AX9
- A-Track AX7B
- A-Track AX11
- A-Track AK11
- CalAmp LM42xx
- CalAmp V-series
- CalAmp 3640
- DCT Syrus 3GBL
- ERM StarLink Fleetilla LX200
- Geometris 80
- Sierra Wireless GNX6
- Suntech ST20
- Teltonika FM3001
- Wireless Link
- iOSix
- Pacific Track PT30
- ELD4U.
- 3R VT-7

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p.22