Truxbox ELD User manual

Version 04.17.001

Truxbox ELD TT1.01

TRUXTRAX

Electronic Logbook | ELD | Real-Time Tools | Reports

Getting Started

STEP ONE: Create an account

- Visit truxtrax.com and click Sign in/Sign up
- Create an account by entering your company, vehicle, trailer and driver information.
- Check your email inbox for your registration confirmation and your first vehicle PIN number.

Side note: After you complete step one, you can now add as many vehicles, trailers and drivers as you need. The PIN number for each vehicle can be found inside the vehicle tab of the dashboard.

STEP TWO: Download the app

- iPhone : Search "TruxTrax" in the app store
- Android: Search "TruxTrax" in the Google Play Store
- Activate your PIN by logging in to the app with the PIN number provided for that vehicle

Side note: Download the mobile app for each mobile device for each vehicle in your fleet. Log in to the app using the vehicle PIN numbers which can be found inside the vehicle tab of the dashboard.

STEP THREE: Upgrade to ELD

- Visit truxtrax.com and purchase an ELD subscription for as many devices that you require via secure online payment.
- Your ELD device/devices will be sent to you by courier.
- Each Truxbox ELD will come with a Truxbox ID number which you will need for installation

Connecting the ELD

1. Login at TruxTrax.com
2. Select a vehicle from the vehicle tab
3. Select a Truxbox ID from the dropdown menu for that vehicle.
4. Connect your Truxbox ELD to the engine diagnostic port of the vehicle.
5. Pair your mobile device with the Truxbox ELD via Bluetooth/BLE by searching for the mac number indicated on the device.
6. Log into the TruxTrax app using the PIN number associated to that vehicle.
7. The Truxbox ELD will feed your trip information and ELogbook with the information sent from the engine's computer.

Using the app

SETTINGS:

- Set your carrier information and your time zone
- Adjust your settings for Mi. vs KM, Cost per, USA or CAN
- Adjust your logbook setting for information intervals and cycles
- Personalize your notifications
  - TIP: Keep your mobile device (phone or tablet) plug in to a charger at all times while using TruxTrax to prevent a loss of connectivity or a ELD Malfunction if you mobile device loses battery power

TRIP:

- Tap on "Trip" from the home screen
- Set your current odometer reading
- Select the driver/co-driver/trailer
- Set your departure and destination
- Enter trip/load number
- Click "Start"
- On this screen you will see a real time map, your total distance and state mileage calculation, as well as fuel and expense costs
- From this screen, using the menu button in the upper right corner you have options to add fuel, add expenses, notes, edit your trip, pause your trip and stop your trip.
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ELD

- The function shows you the status of your ELD connection. The function icon will appear red if the is a data diagnostic event of malfunction that needs your attention. Tap on the ELD section and you will see the data diagnostic event or malfunction code with a small description. Please see Data diagnostic/ Malfunction Management sheet on page.
  - Note that the ELD Data diagnostic/ Malfunction Management only englobes events regarding the ELD device itself and not the mobile device
- The function will also sound an alert if ever your mobile device which is connected to the ELD via Bluetooth ever loses connectivity. Examples are leaving the truck will your mobile device is still connected to the ELD and is out of range or, a connection problem with the mobile device.

ELOGBOOK

- Tap "Logbook one" for the first driver.
- Select the driver and tap "Start". It is recommended to setup driver PIN's in the TruxTrax dashboard for security reasons
- Repeat for "Logbook two" if necessary for second/co-driver
- This screen will show you the traditional logbook graph and other details such as inspections, violations and warnings
- From this screen, using the menu button in the upper right corner you have options to sign your logbook, enter inspection information, use the DOT mode, send/share your logbook, HOS recap or close the logbook

- New status
  - Tap on specific status button under the graph to edit that status
  - Available status:
    - OFF – off duty
    - SB – sleeper berth
    - DR – driving
    - ON – on duty
    - PC – personal use
    - YM – yard moves

  - Enter start and end times
  - Enter location and odometer reading and any notes.
  - Tap save and return to the ELogbook
  - All manual changes to the duty status will be logged and included in the roadside inspection display/email/pdf
  - *Information captured from the ELD may not be edited.

- New Inspection
  o Set you location and odometer reading
  o Specify if it is pre/post trip inspection
  o Enter vehicle information and select any defects from the list
  o Enter trailer information and select any defects from the list
  o Click sign and save
  o Certify your inspection (Tap on button: Agree or Not ready)

- Roadside inspection mode
  o The Roadside inspection mode lets you select the last 7 day or 14 day period of you electronic logbook and the all events ELD log. The all events ELD log records all of your Engine, ELD and Driver activity in the mandated format. Upon tapping Roadside Inspection from the menu, simply select your desired date range.
  o This screen of the Roadside inspection mode can be used to present a digital representation of your electronic logbook and all events ELD log for DOT inspection.
  o The Roadside inspection mode allows you to share your electronic logbook and all events ELD logs via email for DOT inspection by simply tapping on **email** and entering the email address in which to send your data for DOT inspection, and tap send.
  o This screen will also allow you to share your electronic logbook and logs via web services and for DOT inspection by tapping on **web services** button. Enter a comment in the notes section and tap send.
  o This screen also allows you to save your electronic logbook and all events ELD log as a PDF for printing purposes for DOT inspection by tapping on PDF and saving the file to your device. It can then be printed by your personal printing solution
  o Do not forget to certify your electronic logbook (Tap on button: Agree or Not ready)

- Certification of Records or Re-Certification of Records
  o This function serves as an electronic signature for your logbook when you have completed your logbook and for after you have made some changes after you have certified your logbook
  o This function will read "I hereby certify that my data entries and my record of duty status for this 24 hour period are true and correct"
  o Simply tap on "Agree" if you are ready to certify, or tap on "Not ready" to continue with this logbook.

- HOS Recap
  o The function shows you how many hours of driving you have left, how many hours in your shift is left, your cycle and duty progress/status, and a full recap of your HOS by day.

SWITCH ACTIVE DRIVER

In the instance where one device is used in one vehicle for a team of two drivers, whereas one dirver will **occupy Logbook 1** and the other driver will occupy **Logbook 2,** a change of who is the **active driver** in the TruxTrax mobile app is necessary.

The driver who occupies Logbook 1 will be the active driver by default at the start of a trip. To change the active driver to the driver occupying Logbook 2 simply tap and hold the Logbook 2 button (3-4 seconds) on the main screen until the driver who occupies logbook 2 is designated the active driver.

Using the Dashboard

EN-ROUTE

- This section allows you to track your vehicles location and route in real-time
- Click on a vehicle from the list or zoom in to obtain further detail
- By clicking on the vehicle icon on the map you may obtain and edit their trip information, send the driver an instant message, show the route detail and mileage details.

CHAT

- This section allows to message one driver or the entire fleet at the same time.
- You can share trip information updates, photos and forms

ALERTS

- This section uses a "Geo fence" attribute to alert you of certain events
- Events can be based on location, distance or date.
- Program an alert for when a driver arrives at a certain destination, has covered a certain distance or a date for a vehicle inspection, maintenance, load delivery

DRIVERS

- This section is where you add, edit and delete driver profiles.

VEHICLE

- This section is where you add, edit and delete vehicle information.
- Inside each vehicle profile page is a unique PIN number needed to log in to the mobile app
- Inside each vehicle profile page is a field where you need to enter the Truxbox ID for that vehicle
- You may also unlink a PIN from a device by clicking on "unlink" in the vehicle profile. This will allow you to log in to a new device using this PIN.

TRAILERS

- This section is where you add, edit and delete driver profiles.

HISTORY

- In this section, by using date and vehicle filters you may see the historical data for each vehicle for route, mileage, fuel, and expenses.

REPORTS

- In this section, using the available filters such as dates, vehicles, distance unit, gas unit, quarter etc
- You may run reports for one, many or all vehicles for mileage, fuel and IFTA

TRUXBOX ELD REQUIRED APPLICATIONS

- TruxTrax Web Application - Required to create Vehicle, Trailer and Driver profiles and attribute ELD device to vehicles
- TruxTrax Mobile Application – Required to use ELogbook and ELD for each vehicle
- Truxbox ELD Device - Engine connected device with used to connect the ELD to TruxTrax Mobile Application

ADDITIONAL DOCUMENTATION:

- Please keep a copy of this user manual in each vehicle.
- Driver are required to have blank drivers records of duty status forms with graph-grids and duty status with throughout their trip in the event of an unlikely technological barrier preventing them from using the mobile application and ELD.
- An instruction sheet or checklist describing possible ELD malfunctions and reporting requirements to record such malfunctions in the unlikely event that one should occur.

ELD DATA DIAGNOSTICS / MALFUNCTION MANAGEMENT

TruxTrax provides the ELD Malfunction sheet for drivers included in the Truxbox ELD user manual, which they can present to a DOT officer during an inspection in case of an ELD malfunction.

A motor carrier must ensure that its drivers possess onboard a commercial motor vehicle an ELD information packet containing the user manual for the driver describing how to operate the ELD; An instruction sheet for the driver describing ELD malfunction reporting requirements and recordkeeping procedures during ELD malfunctions; and a supply of blank driver's records of duty status graph-grids sufficient to record the driver's duty status and other related information for a minimum of 8 days.

Data Diagnostics

An ELD must have the capability to monitor its compliance with the technical requirements. It must detect and record events related to malfunctions and data inconsistencies. (Subpart B, section 4.6)

Data Diagnostic Events: These events are when an ELD indicates there is a data inconsistency. The driver must follow the recommendations by the ELD provider to resolve the inconsistency, if it occurs. [Section 49 CFR 395.34(c)]

Power data diagnostic code 1

An ELD must monitor the Data it receives from the engine ECM or alternative sources, and data record history to identify instances when it may not have complied with the power requirements

Cause

- ELD not fully functional within one minute of the engine turning on
- Wiring or power source fault

Response

Drivers must check that their logs are correct by reviewing them on the mobile application. Then, they can resolve the diagnostic event by turning of the Truck engine and restarting. The driver must notify the carrier and TruxTrax by following the "hard malfunction" process if these events become a regular occurrence.

Engine synchronization diagnostic code 2

An ELD is required to establish a link to the engine ECM, and must record an engine synchronization data diagnostics event, when it no longer can acquire values for the ELD parameters required for records within five seconds.

Cause

- Wiring or connection fault

Response

Drivers must notify the carrier as soon as possible and arrange for the ECM link to be restored. Once the ECM link is restored, drivers must thoroughly review their logs and edit, as necessary, to ensure they are correct.

Then, they can resolve the diagnostic event by turning of the Truck engine and restarting. The driver must notify the carrier and TruxTrax by following the "hard malfunction" process if these events become a regular occurrence.

Missing required data elements data diagnostic code 3

An ELD must monitor the completeness of the ELD event record information in relation to the required data elements for each event type, and must record a missing data element and data diagnostics event for the driver, if any required field is missing at the time of recording.

Cause

- Temporary or permanent loss of GPS
- Intermittent or disconnected link to the vehicle ECM

Response

Drivers can resolve this data diagnostic by manually entering the missing data associated with their records along with an explanation. The driver must notify the carrier and TruxTrax by following the "hard malfunction" process if these events become a regular occurrence.

Data transfer data diagnostic code 4

An ELD must implement in-service monitoring functions to verify that the data transfer mechanism(s) are continuing to function properly. An ELD must verify this functionality at least once every seven days.

Cause

- ELD fails to communicate records to EROAD Depot for seven continuous days

Response

Unless driving in an area with known cellular coverage issues, drivers should notify their carrier immediately. This fault auto-resolves, if the device begins to communicate successfully again. The driver must notify the carrier and TruxTrax by following the "hard malfunction" process if these events become a regular occurrence.

Unidentified driving records data diagnostic code 5

If more than 30 minutes of driving in a 24-hour period shows unidentified driver on the ELD, the ELD must detect and record an unidentified driving record data diagnostic event, and the data diagnostic indicator must be turned on for all drivers logged in to that ELD for the current 24-hour period and the following seven days.

Cause

- More than 30 minutes combined vehicle use without a logged-in driver

Response

Drivers must review the unidentified journeys recorded on the ELD and accept any periods of drive time recorded, while they were driving and not logged in to the ELD system.

Malfunctions management

Malfunction events are when the ELD detects technical compliance issues. The driver must: (1) notify the motor carrier within 24 hours, (2) reconstruct the record of duty status for the current 24 hours and the last seven days on graph -grid paper logs that comply with Section 49 CFR 395.8. Keep paper logs until the ELD is serviced and brought back into compliance. [Section 395.34(a)]

Power compliance code P

An ELD must monitor the data it receives from the engine ECM or alternative sources, and data record history to identify instances when it might not have complied with the power requirements.

Cause

- More than 30 minutes of driving time lost in a 24-hour period

Response

Drivers should review and correct their logs, and notify their carrier of the fault. Once the fault has been corrected, the malfunction is cleared by explaining the fault and resolution in the ELogbook notes section.

Engine synchronization code E

An ELD must set an engine synchronization compliance malfunction, if connectivity to any of the required data sources is lost for more than 30 minutes during a 24-hour period aggregated across all driver profiles.

Cause

- More than 30 minutes without ECM engine synchronization over a 24-hour period

Response

Drivers must notify their carrier as soon as possible and arrange for the ECM link to be restored. Once the ECM link is restored, drivers must thoroughly review their logs and edit, as necessary, to ensure they are correct. Then, they can resolve the diagnostic event by turning of the Truck engine and restarting. The driver must notify the carrier and TruxTrax by following the "hard malfunction" process if these events become a regular occurrence.

Timing compliance code T

The ELD must periodically cross-check its time with an external UTC source, and must record a timing compliance malfunction when it can no longer meet the underlying timing requirement of less than 10 minutes' time deviation.

Cause

- Vehicle has been out of service for sufficient time that the internal clock is no longer accurate, and the ELD has not yet synchronised its time

Response

Once the internal clock has been corrected, drivers are prompted to review their logs before resolving the malfunction. Then, they can resolve the diagnostic event by turning of the Truck engine and restarting. The driver must notify the carrier and TruxTrax by following the "hard malfunction" process if these events become a regular occurrence.

Positioning compliance cone L

An ELD must monitor elapsed time during periods when the ELD fails to acquire a valid position measurement within five miles of the CMV's movement. When such elapsed time exceeds a cumulative 60 minutes over a 24-hour period, the ELD must set and record a positioning compliance malfunction.

Cause

- More than 60 minutes without a valid GPS fix in a 24-hour period

This malfunction might appear during a temporary loss of a valid GPS fix, but it auto-resolves once GPS is restored. The driver must notify the carrier and TruxTrax by following the "hard malfunction" process if these events become a regular occurrence.

Data recording compliance R

An ELD must monitor its storage capacity and integrity and must detect a data recording compliance malfunction if it can no longer record or retain required events, or retrieve recorded logs that are not otherwise cataloged remotely by the motor carrier.

Cause

- Hardware fault

Response

The driver must notify the carrier and TruxTrax by following the "hard malfunction" process.

Data Transfer compliance code S

After an ELD records a data transfer data diagnostic event, the ELD must increase the frequency of the monitoring function to check at least once every 24-hour period. If the ELD stays in the unconfirmed data transfer mode following the next three consecutive monitoring checks, the ELD must detect a data transfer compliance malfunction.

Cause

·Failure to communicate for three days following a data transfer data diagnostic event

Response

Unless driving in an area with known cellular coverage issues, the driver must notify the carrier and TruxTrax by following the "hard malfunction" process if these events become a regular occurrence. This fault auto-resolves, when the device begins to communicate successfully.

ELD HARD MALFUNCTION PROCESS

If the TruxTrax ELD (truxbox) is experiencing a hard malfunction whereby the driver is unable to resolve an event or the events are recurring repeatedly the driver/carrier should:

- Contact TruxTrax support at support@truxtrax.com
- Take note of the malfunction and provide a written description to your fleet manage within 24 hours
- Keep a paper log or use the TruxTrax mobile app ELogbook feature for that day and until the ELD is repaired or replaced. In the event of an inspection, you may display the previous 7-14 days from the mobile app.

IMPORTANT INFORMATION CONCERNING MALFUNCTIONS

If a motor carrier receives or discovers information concerning the malfunction of an ELD, the motor carrier must take actions to correct the malfunction of the ELD within 8 days of discovery of the condition or driver's notification to the motor carrier, whichever occurs first.

In the event of an ELD malfunction, TruxTrax will send a new tELD device upon notification from the owner-operator or fleet manager.

If a motor carrier requires a time extension, they must notify the FMCSA Division Administrator for the State of the motor carrier's principal place of business within 5 days after a driver notifies the motor carrier. (section 395.34(2))

CONTACT INFORMATION

Questions or comments, just let us know.

support@truxtrax.com | https://www.truxtrax.com

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