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Saucon ELD Solution

Saucon TDS™ is the core component for a total transportation communications solution that provides visibility and transparency into the activities of operations.

Telemetry on every asset in the fleet is gathered by ‘PROX,’ an on board computer that captures positioning signals from GPS satellites, direct engine data (ECM), video cameras/recording devices, and other data sources, and transmits data from the vehicle over a wireless network to a secure data center. Access is provided to a secured online web portal that is customizable to every business need. Coupled with a user-friendly 7” touch screen display called the Saucon Touch, our Saucon Prox ELD solution is part of the Saucon family of integrated solutions for your fleet.
ELD Compliant Product

The Saucon PROX ELD device is offered in standard form, or with an additional connection port to support Wifi Connectivity.

- Connecting Engine Monitoring: Engine data is obtained either over the J1939 or J1708 network
- Connecting Start Disable Relay: Saucon recommends secured driver startup for ELD customers, requiring the driver to enter a unique code to allow the vehicle to start. In addition to the enhanced security this feature provides, it also minimizes ELD unassigned driving records.
- ELD Compliance: The combination of a ‘Touch Enabled’ PROX device, plus a Saucon Touch driver display (software version 20170221 or higher), with all appropriate connections and installation recommendations, comprises the Saucon Prox ELD compliant product. PROX devices used with other driver displays, or without the appropriate software upgrade, remain AOBRD compliant.
Driver Sign In

To **Sign In**, tap the ‘Sign In’ button on the Welcome Aboard screen on the Saucon Touch display to access the “Enter Driver Id” screen.

When prompted, tap in the Driver Id field to enter your assigned Driver Id and Trip number, then tap Submit or Cancel.

Once signed in, the Driver’s name is displayed on the bottom navigation bar.
Main Console – App Selection

The **Main Console** screen displays all Apps that the driver is permitted to access based on selections made by the Safety Administrator within the TDS Portal.

- Tap the Driver Log App icon to access the Driver Log App.
- The driver’s status is automatically set to On Duty Not Driving upon sign in.
- The vehicle is in motion (and driver’s status set to “Driving”) when ECM speed reaches 3 MPH or greater.
- When the vehicle’s ECM speed reaches 0 MPH for 3 consecutive seconds, the vehicle is considered ‘stopped’ (not in motion).
- No comments, duty status changes, or logbook entries can be made while the vehicle is in motion.
- An audible and visual warning message is displayed when the vehicle is in motion without a signed in employee.
- Selecting a comment when the vehicle is stopped changes the driver’s status to ODND.
The **Progress Screen** provides the driver with easy access to status buttons, comments, special mode options, remaining time and other menu options.

- The driver’s current duty status is displayed at the top of the screen, next to the driver’s name.
- To change status, the driver can tap one of the three status buttons available (OD, SB, and OFF), while the vehicle is stopped (ECM speed of 0 mph for 3 consecutive seconds).
- The Duty Status button turns green when tapped, and matches the current status displayed. There is no DRIVING button, as a speed of 3 mph or greater changes status to driving.
- The ELD records all driving time automatically, and Driving time cannot be reduced by the administrator or driver.
- The Driver’s Home Terminal time and time zone are displayed in the upper right corner of the screen.
- The driver’s hours remaining for each HOS clock are displayed in the center of the screen next to the progress bars. As hours are used, the progress bars decrease from right to left and are color coded green, yellow or red to indicate approaching HOS limits.
Exemptions and Settings – My Profile

From the Progress screen, tap the My Profile icon to view any settings and exemptions that have been configured for the driver by the Safety Administrator. Exemptions must be set by the Safety Administrator within the driver’s employee record in the TDS Portal.

- It is the Motor Carrier’s responsibility that the following settings and exemptions are assigned and monitored properly:
  - **100 Air Mile Exemption** – indicates the driver remains under the 100 Air Mile Exemption. When these drivers use a bus equipped with an ELD, the driver remains On Duty Not Driving even if vehicle is moving.
  - **Less than 8 days in rolling 30 day period** – indicates the employee is exempt from using an ELD, but instead records time using a paper log when needed.
  - **Yard Movement** – allows driver to access the Yard Movement button that keeps driver in On Duty Not Driving status only while operating the vehicle in a geofence marked as ‘Dispatch’.
  - **Personal Conveyance** – allows the driver to access the Personal Conveyance button that keeps driver in Off Duty status during periods of authorized personal use of the vehicle.
  - **Sleeper Berth** – allows the driver to access the SB status button that when selected puts driver in Sleeper Berth status.
  - The presence of a checkmark in the box next to the setting indicates the driver’s ELD profile has been configured to utilize the exemption/feature.
Auto-On Duty and Driver Annotations

Auto On Duty

When the vehicle has been stopped for five minutes while the driver is in ‘driving’ status, a prompt appears with the following three choices:

- Remain in Driving status.
- Change to On Duty Not Driving status.
- Change to Off Duty status.

If there is no response one minute after the prompt, the system automatically changes the driver’s status to On Duty Not Driving, with an annotation of “Auto On Duty” in the log event.

Driver Annotations

Drivers can annotate their logbooks, while the vehicle is stopped, by choosing one of the pre-selected comments listed below the OD button. To see additional comments, tap ‘More’ for more choices, or to type a custom comment by selecting ‘Other.”
Yard Movement (YM) and Personal Conveyance (PC) options can be accessed from the Progress screen, if enabled, and are displayed in orange on the driver’s graph, and on the duty event section of their log.

- YM can only be selected when the vehicle is in the designated geo fenced dispatch area. When selected, YM sets the driver’s status to ODND, and maintains the ODND status until the driver indicates that the YM has ended. If the vehicle departs the yard, an event will be placed on the driver’s log noting when the driver departed the yard. On the display, a prompt will appear advising the driver that the bus has left the yard and ask the driver to change status to Driving. The driver will remain in ODND/YM status until the prompt is acknowledged.

- Drivers can only select Personal Conveyance when in OFF DUTY or SB status.

- When PC is selected, the driver is prompted to select from one of the following three choices to annotate the logbook: Travel to Hotel; Travel to Restaurant; or Other. The driver’s status will remain Off Duty during the periods of authorized personal use of the vehicle.

- When the driver indicates that PC is ended, a prompt is displayed requesting the driver to select a different duty status.

- If a driver turns the vehicle off, and later returns to the same vehicle, the system reminds the driver they were in PC mode and provides choices to select from.
The **Adverse Conditions** option can only be selected by the driver when the vehicle is not moving. Selecting Adverse Conditions does NOT add an additional two hours to the drivers remaining time.

A yellow dot is displayed on the graph at the time the driver tapped the Adverse Condition button. In addition, an event is automatically added to the log book noting a comment of ‘adverse conditions’.

**Regulation Set:** To change the regulation set FMCSA Passenger (8 days) drivers must manually tap the button and select from a list of alternate options configured for them. The options listed in the list are determined by the Safety Admin, and are administered in the TDS portal.

When the regulation set is changed by the Driver the system updates and downloads the appropriate number of logs required to be stored on the device.

- FMCSA Passenger (8 days): eight (8) days of logs are stored on device.
- Canada North & South cycle 1 or 2: 14 days of logs are stored on device.

Drivers are responsible for selecting the appropriate regulation setting.
Driver Annotations

The ELD system provides a select list of options that the driver can choose from to add annotations to the log to provide additional information pertaining to a duty event. Annotations are optional, but will set the driver’s status to ODND when the vehicle is stopped.

The following comments are available on the Saucon Prox ELD system:

- Pre-Trip
- Post-Trip
- Un/Loading
- Inspection
- Repair
- Obtaining Assistance
- Fueling
- Rest Stop
- Driver Comment – allows driver to enter free form text comments to their log
Driver’s Log

Tapping the red ‘circle’ button exposes additional menu options available to the driver.

The View / Edit icon allows the driver to access and edit his/her 8 or 14 days’ worth of logbooks. **Note: this screen is not designed for roadside inspection and data transfer.**

The system dynamically draws lines along each row on the graph as the duty status changes. The events below the graph reflect the status changes, comments, or auto-generated events triggered by the driver or rules programmed in the system.

- The log date and driver’s name are displayed at the top of the graph. The driver’s total hours for each status and total hours worked today are displayed on the graph in the time format “hh:mm:ss.”
- To navigate through each day’s log, tap the previous or back button at the top of the screen. The Collapse/Expand button controls whether the duty event section below the graph is shown or hidden.
- The Recap Totals button displays the driver’s summary of hours and miles for the week.
- The Add Duty Detail button displays a screen to allow the driver to manually add a new duty event to their log.
Add Duty Events

Drivers are permitted to add duty events to their logs, as long as the event does not reduce electronically recorded driving time and is not in the future.

- Tap the Add Duty Detail menu option at the top of the log, making sure to be on the correct log date. The system displays the add duty detail screen that the driver will use to create the new duty event.
  - Tap one of the three status buttons (OFF, SB, or OD) to select the event status.
  - Tap into the Time field to set the event time.
  - Tap into the Asset field and select from the list or enter an asset #.
  - Tap in the Location field and manually enter the City, State, using the virtual keyboard.
  - Tap into the Trip Id field to manually enter the Trip Id if applicable.
  - Tap in the Comments field to select a comment from the list. (Pre-trip, post trip, etc.)
  - The Company Name & Address, and Load Type (Passenger or Property) will auto-populate, but can be manually changed. Save when finished.
  - Tap in the Reason field to select an option from the list; Manually enter at least four characters in the Notes field in order to save the manually created event. Provide an explanation as to ‘why’ the event is being created.

- SAVE – adds the event to the Drivers log.
- CANCEL – cancels the event and does not add the event to the log.
- Validations will be displayed if a manual event is created that would reduce electronically recorded driving time; the system will not allow the manual event to be saved.

The Reason and Notes fields are required fields in order to ensure the driver annotates the reason why they have made edits to their log.
Recap Totals

To view **Driver Recap Totals**, tap the Recap Totals icon located at the top of the Graph screen.

The Recap screen displays total hours for each log day (8 or 14 days – FMCSA or Canada) including total ECM miles. All data displayed in the screen is read-mode.

The columns shown are as follows:

- Date of log.
- Worked – Total hours Driving + On Duty Not Driving time.
- Off – Total hours Off Duty.
- SB – Total hours in Sleeper Berth.
- DRV – Total hours Driving.
- OD – Total hours in On Duty Not Driving status.
- Miles – Total Miles for the day.

Tap the BACK button located on the bottom navigational bar to return to the previous screen.
**Sign Logs and Certify Accuracy**

FMCSA regulations require Drivers to certify their driving records at the end of each 24-hour period.

Drivers must tap the **Sign Logs** button to access the **Signature screen**.

The screen shows the driver's total hours and miles worked for each day. Eight (8) or fourteen (14) days will be shown based on the regulation the driver is following.

- Tap the empty box next to the appropriate date to place a checkmark in the box. More than one day can be checked if needed, or the driver can use the “Select All” button to select all days.

- Once the checkmark is visible, the blue ‘Sign Logs’ button toggles to now show ‘SIGN SELECTED’.

- Tap the **SIGN SELECTED** button to certify data entries for selected days are true and correct. Tapping ‘I Agree’ will add the “Driver Signature” event to the log. Tapping ‘Not Ready,’ will not add the Driver Signature to the log.

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**Image Description:**
- **Image 1:** A screenshot showing the Signature screen with dates and times, and a blue button labeled “SIGN SELECTED.”
- **Image 2:** A screenshot showing the Submit Signed Logs page with a checkmark next to the dates and times, and a button labeled “I Agree” and “Not Ready.”
HOS Violations

A red line is displayed on the graph if the driver has exceeded today’s HOS regulation limits. Violations are also reflected by empty bars displayed in the Progress screen. “In Violation” is displayed next to the driver’s name and status on the Progress screen. Notifications are displayed when the driver is either approaching or goes over HOS limits.
Approving Admin Changes

When an Administrator proposes a change to a driver’s log, the driver is required to review the change and either accept or decline it before the change is reflected in the logbook.

When proposed changes exist, the driver will be prompted at sign in to review the changes. Or, the driver can view proposed changes later by tapping the red circle button and selecting the ‘Approve Admin Changes’ icon.

The ‘Approve Admin Changes’ screen shows the original and the proposed graph & duty events so the driver can easily compare and review both logs and decide to accept or decline. If changes to multiple days exist, the driver will be shown the oldest day first, and then walked through subsequent days until all days are addressed.

- The ‘Expand Details’ text displays the duty events for the day displayed.
- All changes made by the Administrator are displayed in pink on the graph and in the summary section at the bottom of the screen.
- By tapping ‘I Accept All Changes’ the system updates the driver’s log with the changes made by the Admin.
- By tapping ‘I Decline All Changes’, the system keeps the driver’s original log and does not update the system with the changes made by the admin.

Note: Only changes made by the Administrator need to be reviewed by the Driver first. If a driver makes edits to their own log, the edits are applied immediately.
To **Sign Off** the device and be set to OFF duty status, first tap the **OFF** Duty status button on the Progress screen.

Then tap the Home icon on the bottom navigational bar to return to the Main Console screen, and tap the Sign Off button.

Additional options: If the driver would like to sign off the device but remain in OD or SB status, then the following steps are required:

- Tap the OD status button and then tap the Sign Off button on the Main Console screen.
- Tap the SB status button and then tap the Sign Off button on the Main Console screen.
- If the Driver is in Driving status and taps the Sign Off button while in ODND or Driving status, a message is displayed asking the driver to confirm whether they would like to change their status prior to signing off.
Inspection Mode

- Tap the ‘red circle’ menu to expose the additional menu options and select the ‘Inspection Mode’ icon.

- The Inspection Mode screen displays all required data to authorized safety officials on demand. The Inspection mode screen includes the following three elements: a daily header, graph grid showing driving duty status changes, and detailed daily log data.

- When the Inspection Mode screen is first displayed, the system shows all eight days of the driver’s graph. All duty events and header details are collapsed by default. Tap the expand icon to expose both of these sections and scroll through the screen to view the data.

- Tap the collapse icon to hide the header and event sections.
Transfer File via Email or Web Services

The Saucon Prox ELD system utilizes the Telematics option (Email and Web Services) as the method of electronically transferring the output file to the authorized safety official.

- The Safety Officer must inform the driver which transfer option is preferred. The driver will tap the ‘Data Transfer’ icon located at the top of the Inspection Mode screen and will be prompted to select the method of transfer (Email or Web Services).

- Once the method is selected, the driver is prompted to enter the output file comment/reference number provided by the safety official. The output comment/reference field allows up to 60 characters.

- A confirmation message is displayed stating the request has been submitted.
The **Team Driving** feature allows two drivers to be signed on the device at one time.

- The Primary Driver operating the vehicle signs into the system first and is moved to driving status once the vehicle begins to move. Tapping the red circle button exposes the **Add Driving Partner** button that allows the Secondary driver (the driver not currently operating the CMV) to sign in.

- After the Secondary Driver enters his/her Driver ID, he/she is required to select a status of On Duty Not Driving or Sleeper Berth.

- Both driver names are displayed at the top of the screen once there are two drivers signed on.
Team Driving – Switching Positions

- To **switch** positions with the Secondary Driver, the Primary Driver must tap ‘Switch Driving Positions’ button.
- The system automatically switches the Primary Driver and the Secondary Drivers’ positions. The Secondary Driver now becomes the Primary (the one operating the CMV), and the Primary now becomes the Secondary Driver.
- A confirmation message is displayed letting the Primary and Secondary Drivers know which positions and statuses they are currently in.
  - The Primary driver will be switched to OD status, but once the vehicle is in motion their status changes to Driving automatically.
  - The Secondary Driver is prompted with two status choices to select from: OD or SB.
- To **view** the Secondary Driver’s Log, tap the red circle and then tap the Driving Partners Log icon. Certain features and buttons are not available to the Secondary Driver when viewing their data. To view the Secondary driver’s graph screen, tap the View /Edit icon.
- To return back to the Primary Driver’s log, tap the “Return to Primary Driver’s Log” icon from within the red circle icon.
End Team Driving & Signing Off

To **End Team Driving** tap the red circle button and then tap the END TEAM DRIVING button.

- A message is displayed prompting the Secondary Driver to choose a duty status.
- When the Secondary Driver selects a status, the system ends team driving (indicated as an event on the log), sets the Secondary Driver’s status to the selected status, and removes the Secondary Driver from the device, thus leaving the Primary Driver signed on.
- The Primary Driver remains signed in and must sign off when ready following the normal process.
Unassigned Driving

The Unassigned Driving screen is displayed when the driver signs into the device. Unassigned Driving events are triggered when the vehicle is moved without a signed-in user.

The screen displays the following information:

- Start/End Time – displays the start and end timestamp for each Unassigned Driving event.
- Start/End Location – displays the start and end location (city/state) for each Unassigned Driving event.
- Miles – total ECM miles are shown for the Unassigned Driving event.
- Duration – total time (hh:mm:ss) the Unassigned Driving event lasted.
- Drivers are required to ‘claim’ Unassigned Driving events belonging to them by placing a checkmark next to each event and tapping on the ‘Claim Selected’ button. This action clears the event(s) from the screen, and adds any ‘claimed’ event(s) to the driver’s log.
- Other choices are: Select all – places a checkmark on all events displayed and adds the events to the driver’s log.
- If “None are mine” is selected, the system notes and records that the driver ‘rejected’ the Unassigned Driving events because they did not belong to him/her.

Unassigned Movements

<table>
<thead>
<tr>
<th>Claim</th>
<th>Start/End Time</th>
<th>Start/End Location</th>
<th>Miles</th>
<th>Duration</th>
</tr>
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<td>0:07:49</td>
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<tr>
<td></td>
<td>2017/02/10 02:16:49 PM</td>
<td>Bridgewater, NJ</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

"The ELD system requires drivers to review unidentified driver records – and either acknowledge assignment of this driving time, or indicate that the records do not belong to the driver."
To access the Vehicle Diagnostics and Malfunctions data, tap the Bus Health icon from the main menu.

The Bus Health screen displays the Data Diagnostics & Malfunctions events in accordance with the ELD Final specifications.

An indicator of ‘OK (green), Diagnostic (yellow) or Malfunction (Red)” is displayed next to each of the following categories:

- ECM Compliance
- Positioning Compliance
- Power Compliance
- Timing Compliance
- Data Recording Compliance
- Unidentified Driving Records

* Note: For the Missing Data diagnostic events, the system displays an indicator at the top of the Drivers graph and along the event row on their logbook. These events are NOT included in the Bus Health data.
Relay / Cushioning App

The Multi-Driver feature is an additional app on the Main Console screen to allow Cushioning/Relay/Relief drivers to log into the device, to track their On Duty Not Driving or Off Duty time when they are considered ‘passengers’ on a Commercial Motor Vehicle (CMV).

The system records each of the ‘Relay’ driver’s start and end events and inserts the data as an event on each of their logs.
ABOUT SAUCON

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- **Telephone**: 484-241-2500
- **Device Name**: Saucon Prox ELD
- **Model number**: PROXST16
- **Software Version**: 20170221 or higher
- **ELD identifier**: PROXST