AssetWORKS

USER MANUAL

AWELD MDT7

Field Service Solution Application

18 September 2019

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USER MANUAL

Hardware User Guide

AssetWorks provides two hardware MDT7 dock configurations for their ELD product.

Hardware Config 1: MDT7 & ME4230

Hardware Config 2: MDT7 & V-Series

Hardware Config 3: MDT7 & ME3640

Preparing/Planning for Installation

Before drilling any holes or running any wires, be sure that the cables to the device will not be bent or constricted in any way and also make sure that the device is kept free from direct exposure to the elements (sun, heat, rain, moisture etc...).

Be advised that an installation that violates the Environmental Specifications of the device will void the warranty.

The best way to ensure a trouble-free installation is to consider your options and make some decisions before you start.

- The dimensions of the device should be considered.
- Wherever you intend to place the device be sure that it will fit before drilling any holes or running cable.
- Mount the device as horizontal as possible for best GPS performance.
- Attach the device to the solid body of the vehicle, not to plastic panels.
- Typical installations will place the device under the vehicle dashboard. Make sure you can get access to the unit afterwards as under some circumstances it may be necessary to add additional wiring or connections or troubleshoot the device.
- It is best not to place the device unit in an unusually warm location such as directly near heater vents, near hot engine components or in direct sunlight.
- Be certain that the cables running to the device will not be bent or constricted.
- Be certain that the installation point will not violate any of the device's environmental specification (temperature, moisture, etc…) as improper installation of the device may void the warranty.
- GPS signal strengths are much lower than those typically seen by cellular networks supported by the device. To maximize the GPS performance, the device should have as clear a view of the sky as possible. The device should not be installed under any metal.
- The device should be installed away from the driver's view of the road.
- When used on a GSM network, each device uses a Subscriber Identity Module (SIM) card. At some future time, you might need or want to replace the SIM card with a different one, so try to install the device in such a way that the cover can be removed to make the SIM card accessible.
- Status LED lights on the unit can provide valuable information about the operation of the device. When feasible, attempt to install the device in such a way that these lights can be seen with reasonable ease.

Hardware Config 1: Know Your AWELD MDT7 & ME4230 Device

	Semi-rugged MDT7 ELD Kit
Device	 MDT7 (docked)
Connection Point for ECU	 ME4230
Light Duty Vehicle	 (vPod) OBDII connector
Heavy Duty Vehicle	 6 or 9 Pin jPod cable
Installation Cables	 LMU to Dock Connector Cable
Mounting Hardware	Std Arm, Balls, Screws to on MDT7 Dock    Mounting mount ball
Dock	 MDT7 Dock

Vehicle Installation

Preparing/Planning for Installation

Be sure you have received all the ME4230 components you need:

- ME4230

- Cabling - 6/9 Pin jPod (Heavy Duty Vehicle) or the OBDII vPod (Light Duty Vehicle)

- Zip Ties / Connectors
- SIM Card (if applicable)

AWELD ME4230/MDT7 Installation

- Connect the 6/9 Pin jPod (Heavy Duty Vehicle) or the OBDII vPod (Light Duty Vehicle) to the vehicle ECU depending on the vehicle type
- The Y-cable (optional) shall have a 6 / 9-Pin Deutsch Receptacle on the jPod and OBDII Receptacle on the vPod that replaces access to the Vehicle ECU Port under the dash

-
- Connect the HD15 connector from the jPod or vPod to the ME4230

- Install the SIM Card in the ME4230 (If required) ○ NOTE: The SIM card inserts properly in only one direction and it should insert all the way and sit properly in the slot

- Install the MDT7 Dock Connector Cable and then tuck the ME4230 behind the dash

-
- ME4230 should be installed away from the drivers view of the road
- ME4230 should not be installed under any metal piece
- Place the ME4230 on the LMU Base. The base should snap on to the ME4230 for a perfect fit
- Preferably install the ME4230 inside the vehicle dash facing upward as described in picture below

- Drill four holes in the front plate of the dash (3/16” drill bit size)
- Attach ball mount to the dash
- Drill ¾“ hole next to the mounting hole for wiring
- Run the MDT7 Dock Connector cables through the hole
- Mount the standard-length arm on the 2.5” base ball

- Mount a 2.5” base ball to the MDT7 Dock with provided screws • Connect the MDT7 Dock to the arm
- Connect the MDT7 Connector cable to the dock

-
- Mount the tablet on the dock

Status LEDs

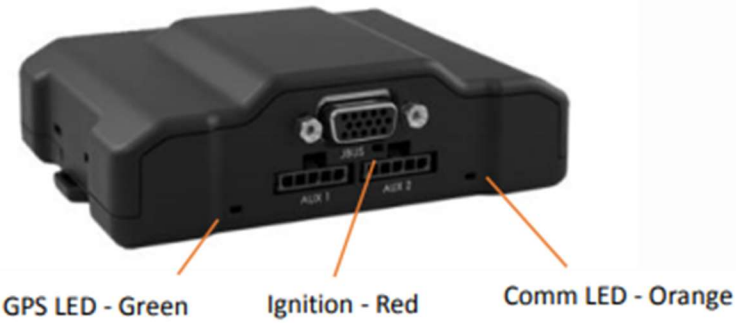
The ME4230 is equipped with three Status LEDs, one for GPS, COMM (wireless network status), and ignition status. The LEDs use the following blink patterns to indicate service:

LED #1 (COMM LED - Orange) Definitions	
Modem Off	Off
Comm On - Searching	Slow Blinking
Network Available	Fast Blinking
Registered but no Inbound Acknowledgement	Alternates from Solid to Fast Blink every 1s
Registered and Connected	Solid

LED #2 (GPS LED - Green) Definitions	
GPS Off	Off
GPS On	Slow Blinking
GPS Time Sync	Fast Blinking
GPS Fix	Solid

LED #3 (IGNITION LED - Red) Definitions	
Ignition Off	Off
Ignition On	Solid

ME4230 LED Positions



Hardware Config 2. Know Your AWELD MDT7 & V-Series Device

Semi-rugged V-SERIES ELD Kit		
Device	 MDT7	 MDT7 V-Series Dock (Connection Point for ECU)
Installation Cables	**Light Duty Vehicle**	 vPod connector (OBDII)
	Heavy Duty Vehicle	 6 or 9 Pin jPod cable (J1939 or J1708)

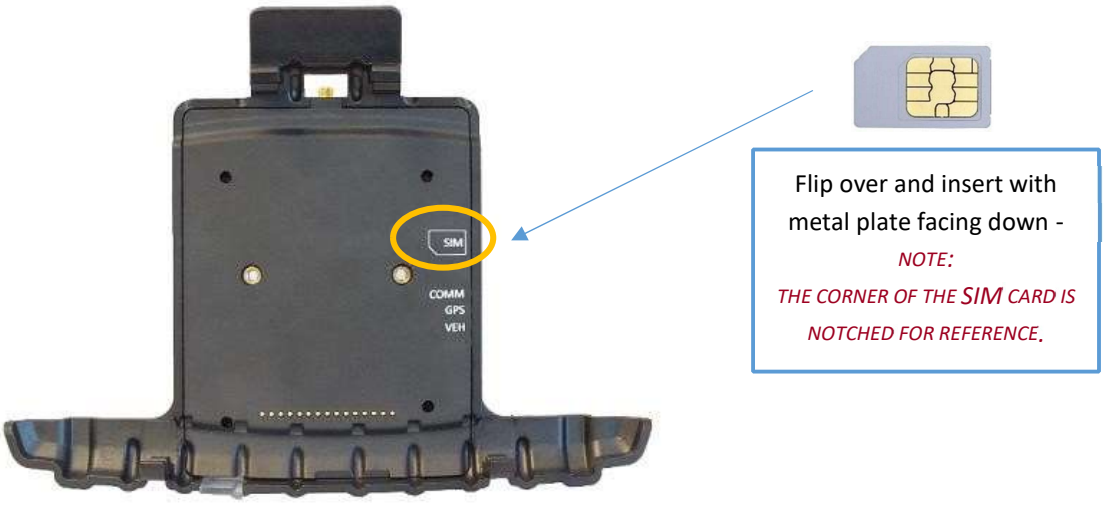
Mounting Hardware	 Standard Length Arm	 2.5” Base Mounting Balls & Screws to LMU V-Series Dock
Cellular Antenna	 Cellular Connection Antenna	
Protection Plate	 Protection Plate	 Mounting Screws
Tablet Docking Screws (optional)		

Vehicle Installation

The V-Series docking station can be permanently installed in the vehicle. The MDT7 tablet can be permanently fixed to the docking station, or it can be just clipped in and removed for security or use in the office or transfer to another vehicle. The docking station provides a secure mount while the vehicle is moving, plus it also provides a means to keep the MDT7 battery charged, and it provides the serial adapter that allows the MDT7 to be serially connected to the MDT7 V-Series Dock.

Preparing the V-Series

- Install the SIM Card in the MDT7 V-Series Dock (If required).
    - NOTE: The SIM card inserts properly in only one direction and it should insert all the way and sit properly in the slot.



- Attached the Cellular connection antennae to the connector on the MDT7 V-Series dock

- Attached the protection plate to the back of the V-Series dock with the four small screws provided

Optional: to securely mount the tablet to the dock, dock the tablet and insert the Tablet Docking Screws into the MDT7 V-Series dock.

- Mount a 2.5” base - ball to the V-Series Dock with provided screws

Mounting the V-Series

- The V-Series Dock should not be installed under any metal piece
- Drill four holes in the front plate of the dash (3/16” drill bit size)
- Attach ball mount to the dash
- Drill ¾“hole next to the mounting hole for wiring
- Run the V-Series Connector cable (vPod or jPod) through the hole
- Connect the 16 Pin VBUS connector from the jPod or vPod Connection cable to the V-Series Dock

- Connect the 6/9 Pin jPod (Heavy Duty Vehicle) or the OBDII vPod (Light Duty Vehicle) to the vehicle ECU depending on the vehicle type. The connection cable will have a 6 / 9-Pin Deutsch Receptacle on the jPod and OBDII Receptacle on the vPod that replaces access to the Vehicle ECU Port under the dash.

- Mount the standard-length arm on the 2.5” base ball

- Connect the V-Series Connector cable to the dock

- Connect the V-Series Dock to the mounted arm

- Mount the tablet on the dock

Status LEDs

Color	Label	Indicator	Status
Orange	COMM	Wireless Network	Solid – connected Flashing – unable to connect to network
Green	GPS	GPS Lock	Solid – connected Flashing – unable to obtain GPS lock
Red	VEH	VBU2 bootloader mode	blinks twice, once a second
		JPOD2 mode	blinks once a second (100ms on – 900ms 0ff) when awake
		VPOD2 mode	Solid - engine on OFF - engine off

Hardware Config 3: Know Your AWELD MDT7 & ME3640 Device

Tablet	 MDT7
LMU	 ME3640
Connection for Light Duty Vehicle	 16 Pin OBD-II Connector (vPod)
Connection for Heavy Duty Vehicle	 J1939 9 Pin Deutsch Type II Connector (jPod)

Installation Cables	 24-Pin Breakout Harness  LMU to Dock Connector Cable
Dock	 MDT7 Dock
Mounting Hardware	Std Arm, Balls, Screws ball on MDT7    Mounting to mount Dock

You will also need:

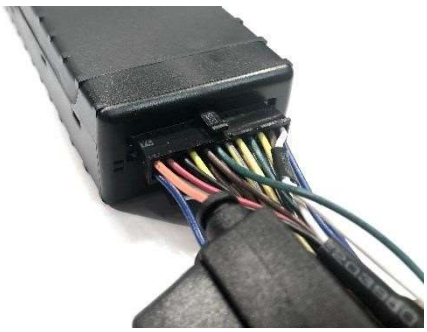
- Zip Ties / Connectors
- SIM Card (if applicable)

Vehicle Installation

AWELD ME3640/MDT7 Installation

- Install the SIM Card in the ME3640 (If required). The SIM card connects in only one direction and it should insert all the way and sit properly in the slot. Note the SIM card chip faces upwards.

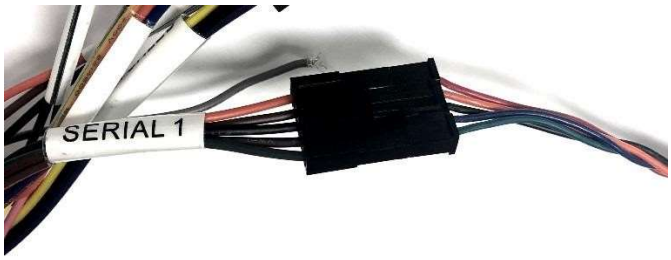
- Connect the 9 Pin Deutsch Type II or the 16 Pin OBD-II to the 16 Pin port on the ME3640. Then connect the 24-Pin Breakout Harness.



- Connect the 9 Pin Deutsch Type II (heavy duty vehicle) or the 16 Pin OBD-II (light duty vehicle) to the vehicle ECU depending on the vehicle type

- The Y-cable (optional) shall have a 6 / 9-Pin Deutsch Receptacle on the jPod and OBDII Receptacle on the vPod that can be replaced on the Vehicle ECU Port under the dash

- Connect the 5-pin female connector from the dock connector cable to Serial 1 on the 24-pin harness.



- Drill four holes in the front plate of the dash (3/16” drill bit size)
- Attach ball mount to the dash
- Drill ¾“ hole next to the mounting hole for wiring
- Run the MDT7 Dock Connector cables through the hole
- Mount the standard-length arm on the 2.5” base ball

- Mount a 2.5” base ball to the MDT7 Dock with provided screws
- Connect the MDT7 Dock to the arm
- Connect the MDT7 Connector cable to the dock

- Mount the tablet on the dock

Status LEDs

The ME3640 is equipped with four Status LEDs, one for GPS, COMM (wireless network status), ignition, and WiFi/BT. The LEDs use the following blink patterns to indicate service:

LED #1 (COMM LED - Orange) Definitions	
Modem Off	Off
Comm On - Searching	Slow Blinking
Network Available	Fast Blinking
Registered but no Inbound Acknowledgement	Alternates from Solid to Fast Blink every 1s
Registered and Connected	Solid

LED #2 (GPS LED - Green) Definitions	
GPS Off	Off
GPS On	Slow Blinking
GPS Time Sync	Fast Blinking
GPS Fix	Solid

LED #3 (WiFi/BT - Blue) Definitions	
Wifi/BT Off	Off
Wifi/BT On	Solid

LED #4 (Ignition - Red) Definitions	
Ignition Off	Off
Ignition On	Solid

ME3640 LED Positions

Software User Guide

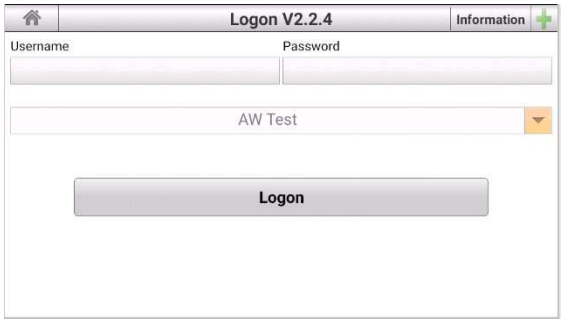
AWELD MDT7 User Guide

Docking the Device

The MDT7 Tablet needs to be placed in the dock when the vehicle is first started. At this point, the FleetLog application will capture vehicle information (i.e. Odometer, VIN#, etc). The device can be removed from the dock after the sign-in process is completed.

Sign In

Login by entering your login credentials – Username and Password. Click “Agree” to the safety message if you agree. The application will now go to the Driver Logs application.



Preview Availability

Every time a driver signs in, the logging device will request the driver's electronic records of duty status (daily logs) from the web server.

When a message is received that logs are received or up to date, click **OK** to view the last recorded duty status and current driving time left. The device will indicate driving time left to be previewed before completing the sign in process.

If you are configured to operate commercial vehicles in both the United States and Canada, you may preview your driving time left for either country before completing the sign in process. Tap the flag icon to select your country setting. All screens, including **Driver Overview**, **View Logs**, and **Vehicle Motion**, will update to show your hours of service information for the selected country.

Initial Status

After previewing availability, tap **Status** and then choose the button that best represents your initial duty status. You may be prompted to enter your location if GPS data is not available. See Location Data Entry.

You will be required to enter an annotation (comment) when selecting Yard Moves (**ON YM**) or Personal Conveyance (**OFF PC**). See **Change Status** for more information about these options.

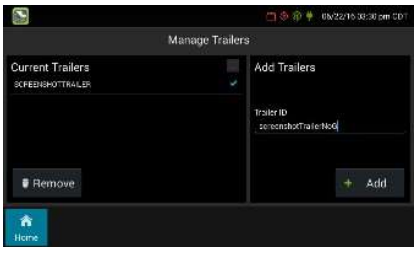
If you are the first driver to sign in during your work shift, the device will prompt you to confirm the vehicle ID. If the vehicle ID has changed or is not correct, tap the pencil icon and enter or update the vehicle ID. If the vehicle ID displayed is correct, or you are finished entering the ID, tap **OK**. Please take caution when updating your vehicle ID to validate that the vehicle ID matches that used by your carrier.

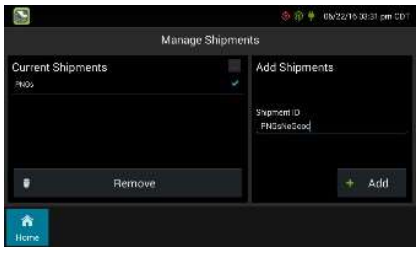
Add or Remove Resources / Shipments

If you are the first driver to sign in during your work shift, you may be asked to review the trailers and shipments added by a previous driver and remove or add new resources.

Tap **Remove** to remove the selected resource shown on the left without recording it on your log. To add a resource, enter the ID in the Shipment ID field on the right and then tap **Add**. You may also add or remove resources after you are signed in.

Tap **Next** to keep all resources shown. This will record these resources, if any, on your current driver log.

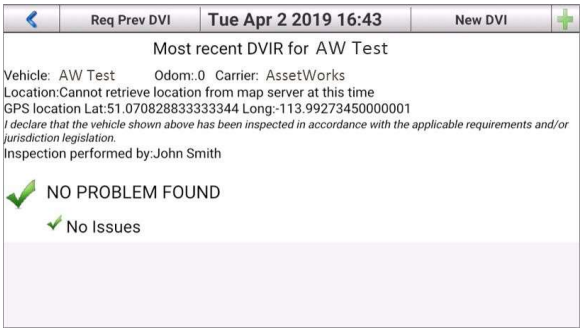




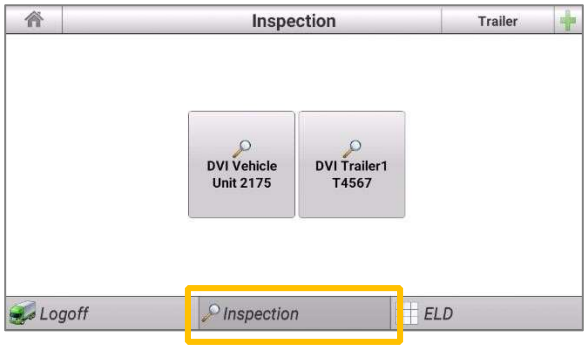
***Note**: The FleetLog view will jump to the foreground. You must have selected ON DUTY status.*

Driver Vehicle Inspection Report - DVIR

After choosing the driver status, the logging device will request the most recent driver vehicle inspection (DVI) report. If a previous report is presented for you to review, review all the information provided and select **New DVI** to complete a new DVI report.

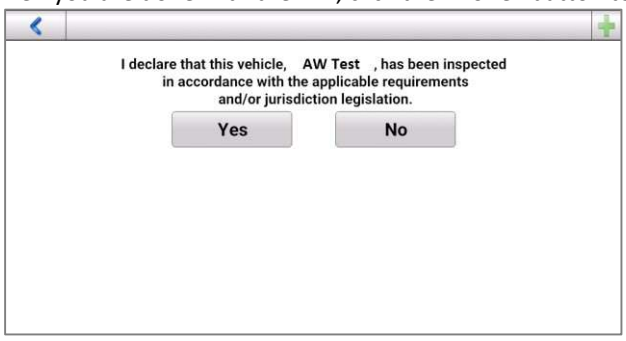


DVI can be accessed at any time from the **Inspection** tab. Trailers can be added via the **Trailer** button in the top right corner to complete a Trailer DVI.



If any defects are listed, certify that the defects were repaired or that repair is not required.

When you are done with the DVI, click the “Done” button to show the acknowledgment screen.



***Note*:** If the Android device is removed from the vehicle during the DVI and the engine is left running and ECU disconnect exception may be generated by the FleetLog system.

Driver Overview

Go to the **ELD** tab and click the **Go to ELD** button to access the main screen of the eFleetSuite application. This screen will show the driver's name, current duty status, and remaining driving time.

Tap **+ Driver** to allow a co-driver to sign in. Tap on any driver's card on the left to see the **Driver Overview** screen for a co-driver who has already signed in.

Driving time left is shown in the large colored gauge. This is the lowest of the driver's applicable HOS limits, or the maximum amount of time they can legally continue operating a CMV without rest. The color reflects approximate driving time left:

8:00	Green – more than 3 hours left
1:01	Yellow – between 1 and 3 hours left
00:00	Red – less than 1 hour left

Tap the circled arrow below **Gain Time At** to display Driving Time Details (the time remaining under each applicable hours of service rule). You may swipe up and down to view more detail if it does not all fit on the screen.

If you have uncertified logs or proposed edits that require review, you will notice an orange flag over the **Options** button and three orange lines in the upper left corner. See **Options** and **View Logs** for more information. A red flag indicates missing data. See **Driver Options**.

Change Status

Go to the **ELD** tab and click the **Go to ELD** button to access the main screen of the FleetLog application. Starting from the **Driver Overview** screen, tap **Status** and then choose the button that best describes your current activity. These buttons are available for all drivers:

On Duty (Driver)	Choose this when you are on duty and taking control of the vehicle. The logging device will detect when the vehicle is moving and automatically record your activity as D (Line 3) when the vehicle is moving and ON (Line 4) when the vehicle is stopped. No other driver may take control of the vehicle until you choose a different status, start a Rest Break, or sign out.
On Duty (Not Driver)	Choose this if you are on duty but not in control of the vehicle. This will record your activity as ON (Line 4). If no one has taken control of the vehicle, the automatic motion detection system will continue to track vehicle movements and report them to your carrier as Unknown Driver events.
Sleeper Berth	Choose this when you are beginning a period of rest in the vehicle's sleeper berth. This will record your activity as SB (Line 2).
OFF Sign Out	Choose this when you are relieved of duty and are signing out of the logging device. This will record your activity as OFF (Line 1). To record your status as off duty without signing out of the logging device, see Rest Break. If your carrier has enabled it, you may also have the option to sign out while remaining on duty.

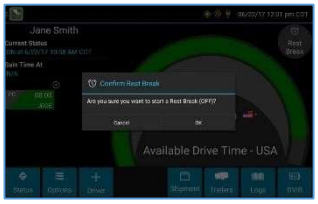
These additional options may be available if enabled by your carrier:

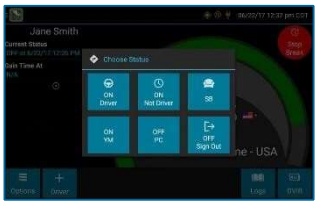
OFF PC	Choose this if you are relieved from all responsibility for performing work and taking control of the vehicle for your own personal use. This will record your activity as "Authorized Personal Use of CMV (PC)" (OFF, Line 1).
ON YM	Choose this if you are moving your vehicle inside your carrier's yard. This will record your activity as "Yard Moves (YM)" (ON, Line 4).

Rest Break

Go to the **ELD** tab and click the **Go to ELD** button to access the main screen of the FleetLog application. The Rest Break feature may be used for recording off duty activity during the work shift. Drivers who use this feature remain signed into the application, thereby avoiding the screen prompts associated with signing out of a logging device and signing back in again.

Drivers should use this feature only when they will return to duty in the same vehicle before the end of the work shift.





To begin a rest break, tap the **Rest Break** button in the upper right of the driver overview screen and confirm that you want to start a break now. This will record your activity as Off Duty (Line 1) without signing you out of the application.

The application will determine the minimum rest necessary to improve driving time and show this value as **Gain Time At**. When the required rest break time is fulfilled, **Gain Time At** and **Available Drive Time** will be recalculated.

To end a rest break, tap the red **Stop Break** button in the upper right to display the Status screen.

Choose **ON Driver** if you are returning to duty and will be operating the vehicle or **ON Not Driver** if you are the co-driver. Choose **SB** if you will continue resting in the vehicle's sleeper berth before returning to duty. Choosing any button other than **OFF Sign Out** will return to the Driver Overview screen and cause **Gain Time At** and **Available Drive Time** to be recalculated.

When you are finished using the vehicle, do not use the Rest Break feature. Instead, choose **OFF Sign Out** from the **Status** screen. This will begin the sign out process and trigger a post-trip driver vehicle inspection (if applicable).

View Logs

Go to the **ELD** tab and click the **Go to ELD** button to access the main screen of the FleetLog application. Starting from the **Driver Overview** or **Home** screen for the driver, tap **Logs** to see the grid view (graph of duty statuses) for today's date (month/day/year). This screen allows you or an official to view your electronic record of duty status (daily log) for each day required to be in your possession. It also allows you to certify your logs, accept or reject unidentified driver events, and accept or reject edits to your logs that were proposed by a user on the host website. If all the details do not fit on one screen, swipe the screen vertically to scroll.

Tap the **Events**/**Grid** button to toggle between the grid view and a line-by-line detail view. Use the arrows on either side of the date or swipe the screen side to side to navigate through your log history. The **Details** button displays general carrier, driver, and ELD information. The **Certify** button allows you to certify your log for the day displayed

GRID

- Graph of all duty statuses for each 24-hour period starting at midnight
- Total hours
- The grid is color coded as follows: Personal Conveyance (OFF)

Yard Moves (ON)

All other statuses

EVENTS (Log Details)

- Duty status changes and locations
- Remarks and annotations
    - Tap an event to add an annotation
- Exceptions claimed by the driver
- Edits and requested changes
    - See **Definitions** for details
- Unidentified driver events
- Malfunction and data diagnostic events
    - See **Malfunction & Data Diagnostic Event Indicators** for more information

Details

- Log date, time, and time zone
- [Canada format only] The cycle being followed
- Name of motor carrier
- USDOT number of motor carrier
- Main office address
- Driver's home terminal name
- Home terminal address
- Driver name, ID, license number and state
- Co-driver(s)
- ELD Provider, Registration ID, and Identifier
- Vehicles (trucks or tractors), trailers, and shipments
- Distance driven[1]
- Total duty hours for the 7- or 8- consecutive day period [US format] or 7- or 14- day cycle [Canada format] ending today[2]
- Current odometer and engine hours[2]
- Current location[2]
- Malfunction and diagnostic indicators

[1]Excluding any distance travelled while operating a CMV as a personal conveyance [2]Visible only when viewing a log for the current date

CERTIFY

- Displays a prompt to certify your log for the date displayed
- You must enter your password when certifying your logs
- Logs cannot be certified if there are pending proposed edits or Unidentified Driver events

Editing Logs

Logs can be edited through the **Grid** and **Events** screens. Note: you cannot delete or edit an ELD-recorded Driving event or the event immediately following. Automatic driving events can only be annotated.

The **Add** button on the **Grid** view allows you to add a new status change to the log date displayed. Tap **Add** to open the new status details screen. Tap to select the Status, Start Time, Location, and Vehicle ID (optional). You will be provided a list of statuses as allowed by your carrier and as applicable for your driver type.

The vehicle ID selection is optional and allows you to choose from the current vehicle ID, vehicle IDs you have used in the last 7 or 14 days, or "N/A" if the status being added did not occur on any of the available vehicles. Enter a Reason for Change, then tap **Save** to finish and add the new event to your log. Tap **Cancel** to return to your log without saving any changes.

To edit or delete existing log events, tap **Events** from the log grid, then tap to select the event. Tap **Delete** to delete the event.

Tap **Edit** to make corrections to the event. Tap the field(s) on the right to edit them. A summary of status changes for the log day is displayed in the pane on the left. Tap an event to display the event details. Finally, tap to enter a Reason for Change, then tap **Save** to finish and update the event.

Your **Available Drive Time** will be recalculated after making edits.

Accept / Reject

If a non-driver host user has proposed an edit to your log, you will need to **Accept** or **Reject** the edit either from the Driver Portal or through the **Logs** page on the device**.**

To view a proposed edit, navigate to the day of the edit, then tap **Events**. Scroll through the events to locate the proposed edit, shown in **red**. You can also tap **Review Logs** from the **Options** menu to navigate to any log that requires review. See **Driver Options**. Tap the proposed event and tap **Accept** or **Reject**. You can use the **Annotate** button to add a comment to the event

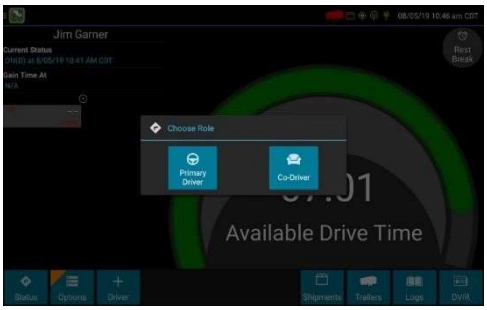
Driver Role Selection

An optional feature of the eFleetSuite ELD solution is to allow the carrier to enable driver role selection. This feature is intended to allow co-drivers the ability to more clearly designate themselves as either the primary driver or co-driver, and to allow a driver to select a driving status from the Status options.

Selecting a Driver Role

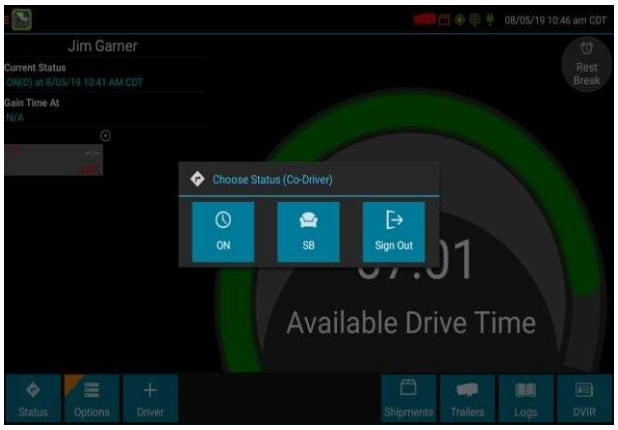
When driver role selection is enabled, co-drivers will be given the option to designate themselves as either the primary or co-driver when signing in and changing status. The first driver to sign in to the device will be shown the normal duty status selection options. Selecting a status of ON, OFF PC, or ON YM will automatically designate them as the primary driver.

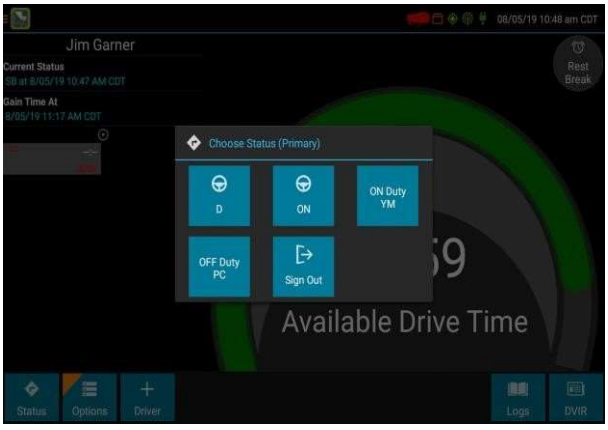
If the primary driver signs into a status of SB or OFF, their co-driver will be prompted to indicate whether they are the primary or co-driver before selecting their initial duty status.



The duty status options available to the driver will be based on their role selection as well as the options available for their driver type and as enabled by the carrier in their driver profile.

Co-Driver: Primary Driver:



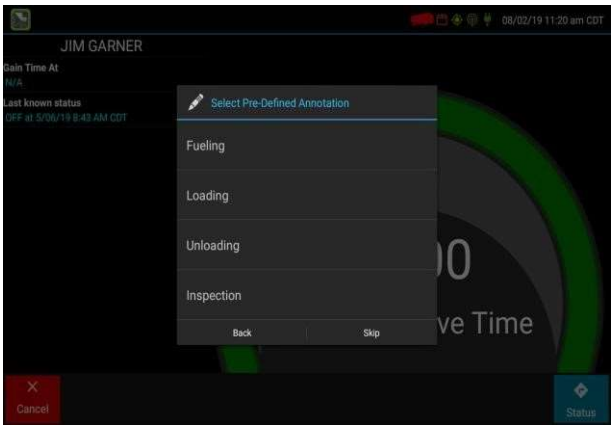


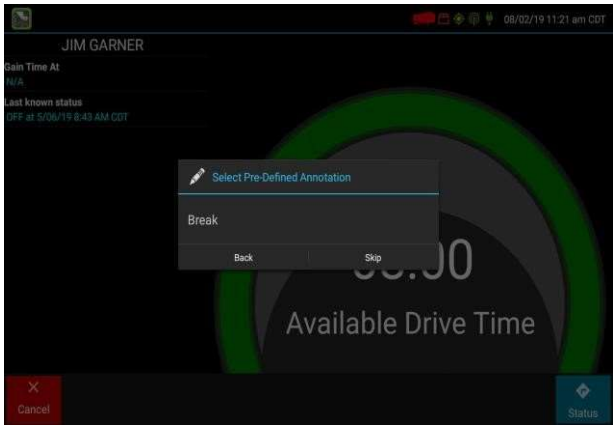
With more than one driver signed in, they will be prompted to select their role when changing status. Only one driver is permitted to be in a primary driver role at a time. To change primary drivers, the driver currently indicated as primary must change status and indicate that they are changing to a co-driver role before another driver can become the primary driver.

Pre-Defined Annotations

An optional feature of the eFleetSuite ELD solution is to allow the carrier to enable pre-defined annotations. This feature is intended to allow drivers the ability to add a common annotation to their logs when selecting a duty status from the Status options.

When pre-defined annotations are enabled, the driver will be given options to add annotations when selecting ON or SB status. Options for ON include: Fueling, Loading, Unloading, and Inspection. The option for SB is Break.



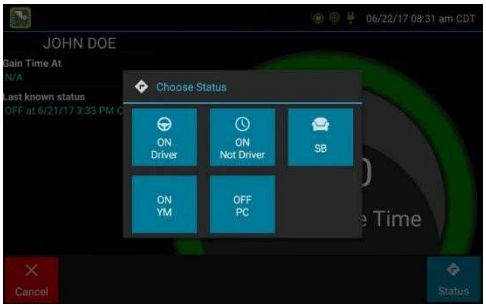


The driver can select more than one annotation if needed or tap **Skip** to continue with changing status without adding an annotation. The annotation(s) will be added to the new duty status on the driver's log.

Personal Conveyance (PC) and Yard Moves (YM)

PC and YM Device Functionality

If a driver is enabled to use PC or YM, they will see the additional options as **OFF PC** or **ON YM** when they sign in to an ELD. Drivers are required to enter an annotation when selecting either of these special driving categories. Drivers using an AOBRD will see the PC option if PC is enabled for the organization but cannot use YM. For devices designed to be removed from the vehicle, PC and YM are only available to select if the device is docked and associated to a vehicle.



On the device **Logs** grid, PC and YM are indicated by striped yellow or purple. This is to distinguish normal Off and On Duty with Personal Conveyance (Off) and Yard Moves (On).

On the device, YM status is automatically ended when:

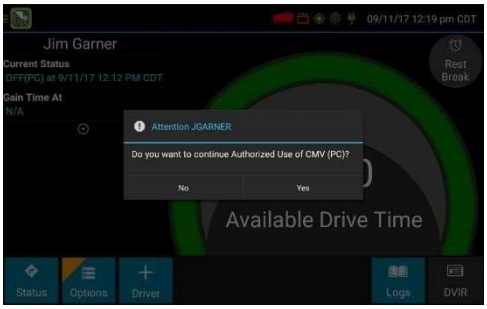
- The vehicle ignition is cycled (On – Off – On) when outside a yard
- The device reboots
- The vehicle speed exceeds the speed threshold within a yard
- The carrier has enabled the speed threshold to apply outside of yards and the vehicle speed exceeds the speed threshold at any time
- The vehicle exits a yard

If drivers wish to continue in YM status after any of these events, they must tap **Status** and select **ON YM** before moving the vehicle again. If a driver forgets to change their status back to YM before moving the vehicle, they will

be automatically placed in a Driving status. Any driving time recorded can be annotated but cannot be shortened or changed to a different status.

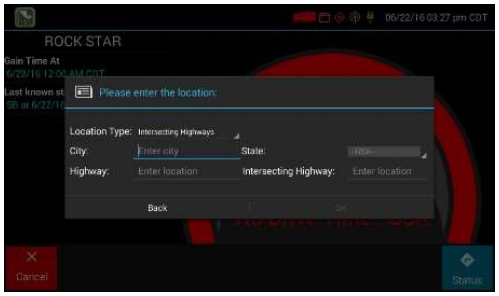
If the organization administrator has added a yard location, the Yard Moves status will persist through multiple ignition cycles, provided the vehicle remains within the radius of the designated yard. If the vehicle leaves the defined yard or exceeds the speed threshold while within the yard, the driver will be automatically transitioned to Driving status.

PC status can be continued through multiple ignition cycles or reboots, but the driver must confirm on a popup window that they wish to continue Authorized Use of CMV (PC) after the ignition or device powers back on. If the driver does not respond to the prompt, they will be automatically placed in driving status when the vehicle moves.



Manual Location Data Entry

Go to the **ELD** tab and click the **Go to ELD** button to access the main screen of the FleetLog application. The logging device uses GPS to determine the vehicle's location at the time of each duty status change. If valid coordinates cannot be obtained from GPS, you will be prompted to enter the location.



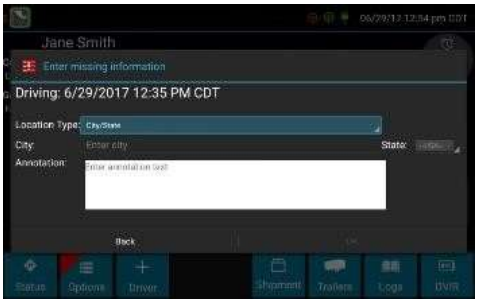
GPS entry consists of the following fields:

Type	Choose from City/State, Intersecting Highways, Highway/Mile post or Highway/Service Plaza.
Name	(optional) Enter the customer name or landmark where the status change or inspection took place. This name will appear in the Events view of your driver logs to provide additional context for your activities. See **View Logs**.
City	Enter the name of the city. If outside city limits, enter the name of the nearest city, town or other population center.
State/Province	Select the state, province, or territory.

If GPS coordinates are not available when the automatic motion detection system records a status change, the driver will need to enter the location of that change after the vehicle stops moving.
If there is a red flag over the **Options** button, tap on it and then tap **Missing Data**.

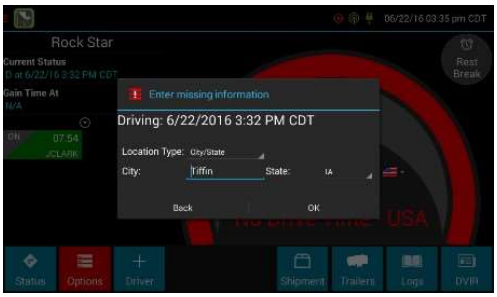
This will display the location data entry screen, where you should verify the date (month/day/year) and time at the top of the screen for each duty status change before entering the location where that change occurred. Enter an annotation to document the change.

Tip: *If the logging device frequently prompts you to enter location data, check the GPS antenna to ensure that it has not become loose or been disconnected.*



Driver Options

Go to the **ELD** tab and click the **Go to ELD** button to access the main screen of the FleetLog application. These options provide a way to record additional information on your logs, synchronize logs with the web server, or change how logs are displayed. Starting from the **Driver Overview** screen, tap **Options**.



Edit Vehicle ID

This option allows you to update the Vehicle ID if the device was provisioned incorrectly or if the Vehicle ID has changed.

Request Logs

This option allows you to synchronize electronic records with the web server at any time during your trip. Use this if you need to:

- Download amendments to your logs for the current or previous day(s)
- Upload unsent logs and inspection reports to the web server

Pre-Shift

This option allows you to record On Duty, not Driving time worked just prior to signing in. Select the date (month/day/year) and time that the pre-shift activity started and verify the total time to be added. Your available drive time left will be recalculated accordingly.

This option will be enabled for up to 48 hours after the sign in process is complete if the driver's previous status was Off Duty.

Post Shift

This option allows you to record On Duty, not Driving time worked just after the driver last signed out. Select the date (month/day/year) and time that the post-shift activity ended and verify the total time to be added. Your available drive time left will be recalculated accordingly.

This option will be enabled for up to 48 hours after the sign in process is complete if the driver's previous status was Off Duty.

Take Exemption

This option allows you to utilize one or more of the following (temporary) exemptions from hours of service regulations. When you take an exception, your Available Drive Time will be recalculated accordingly based on the type of exception claimed.

100 Air-Mile[1]	Relief from the 30-minute rest break requirement and a limitation of 12 hours of Work Shift Duty. Requires a return to the work reporting location. Only for property-carrying drivers.

150 Air-Mile[2]	Relief from the 30-minute rest break requirement. Work Shift Duty limit increased to 16 hours on 2 days in a 7-consecutive-day period or after any 34-hour restart. Only for non-CDL property-carrying drivers.
16 Hour[3]	Work Shift Duty limit increased from 14 to 16 hours. Does not increase Work Shift Driving limit, and may only be used once every 7 consecutive days or after a 34-hour restart.
30 Minute Rest Break	Relief from the 30-minute rest break requirement. Only for propertycarrying drivers.
Adverse Conditions[5]	Work Shift Driving limit increased by up to 2 hours. Does not increase Work Shift Duty limit.
Agriculture[6]	Relief from all Driving, Duty, and Rest Break/Off Duty rules. Only used during state-specified planting and harvesting periods.
Emergency[7]	Relief from all Driving, Duty, and Rest Break/Off Duty rules. Only used in a declared Federal, State, or local State of Emergency.

1 Certain restrictions apply; see US 49 CFR §395.1(e)(1)

2Certain restrictions apply; see US 49 CFR §395.1(e)(2)

3 Available to limited US drivers. Other restrictions also apply. See US 49 CFR §395.1(o).

4 Available to Canadian and limited US drivers.

5 Certain restrictions apply; see US 49 CFR §395.1(b)(1), US 49 CFR 395.2, and CA SOR-2005-313 §76(2).

6 Certain restrictions apply; see US 49 CFR §395.1(k)

7 Certain restrictions apply; see US 49 CFR §390.5 or US §395.1(b)(2), and CA SOR-2005-313 §76(1).

Invalidate Exception

This option allows you to invalidate a previously taken exception. This option is only available for certain exceptions.

Diagnostics

Go to the **ELD** tab and click **the Go to ELD** button to access the main screen of the FleetLog application.

This option allows you to view identification information about the device, as well as a general system health check. Tap and hold on **System Check** to view system details.

Review Logs

This option is visible if you have uncertified logs or if a non-driver host user has proposed an edit to your log that requires your attention. Tapping this option will take you to the log(s) requiring review. See **Certify** and **Accept / Reject** for more details.

Missing Data

This option allows you to back-fill information for duty status changes that have been recorded in the past. This option is visible only if required information (most typically the vehicle's location) was not available when the duty status change was recorded. See **Location Data Entry**.

Unidentified Driver

This option allows you to add driving events to your log that were recorded while no driver was signed into the device. Unidentified driver events are recorded any time the vehicle is moved without a driver signed in, or with multiple drivers signed in but none in **ON Driver**, **YM**, or **PC** status. *To avoid these events, always make sure to properly sign into the device before moving the vehicle.*

Tapping this option will take you to the log date with the unidentified driver event(s). Once you have reviewed the event details, tap the event, and then tap **Accept** or **Reject** to either add the event to your log or discard it. Rejecting the event will remove it from your view on the device. Other drivers and non-driver host users will still view and accept or assign the event.

Take care to only accept events that reflect your activities.

When you **Accept** an unidentified driver event, it is added to your log and your **Available Drive Time** is recalculated accordingly. The system automatically places in you in an **ON Not Driver** status following the unidentified driver event. Both the unidentified driver Driving and following On Duty event will appear on your log with an **Origin** of **Unidentified Driver**.

Roadside Inspection

This option allows an enforcement official to review your logs and allows you to send your logs for the current 24hour period and the previous 7 consecutive days to the FMCSA via email or webservice on the request of an enforcement official. To send your logs, dock your tablet and ensure you have a green web service connection status symbol. See **Web Server Connection Status**.

Tap **Roadside Inspection** and then tap **Data File Transfer**. Tap either **Email** or **Webservice**, as directed by the enforcement official. The official should provide you with a code to be entered in the **Comments** field. Enter the code exactly as provided. Do not include the word “code” or any other text. See **Instructions for Law Enforcement Officials** for more information.

If you are operating in **Canada** and are viewing your logs in Canadian format, this option allows you to email a copy of your logs directly to an enforcement official. This functionality is not for official use in the United States and is not a data file transfer as defined by the US ELD mandate. It will send an unencrypted copy of the driver’s logs that does not include PII such as the driver’s license number. To email your logs, tap Roadside Inspection and then tap Data File Transfer. Enter an email address or select from the three most recently used addresses, add an optional comment, and tap Done to send the logs.

Vehicle in Motion

Go to the **ELD** tab and click the **Go to ELD** button to access the main screen of the FleetLog application.

This message is displayed at the bottom of the **Driver Overview** when the vehicle is moving. While this message is displayed, the application will not allow any interaction with the user.
If the person operating the vehicle is on duty and has less than one hour of driving time left, audio warnings may sound periodically while the vehicle is moving.

The dialog may display the following additional information:

No driver is signed in	No one is signed in to the device. Sign in as soon as you are safely able to do so. An audio warning will play when the vehicle begins moving.
Change status to driver	A driver is signed in to the device, but is not in **ON Driver**, **OFF PC**, or **ON YM** status. An audio warning will play when the vehicle begins moving.
Authorized Personal Use Of CMV (PC)	The vehicle is being moved with the driver in Personal Conveyance status.
Yard Moves (YM)	The vehicle is being moved with the driver in Yard Moves status.

If the person operating the vehicle is in Driving status and has less than one hour of driving time left, audio warnings will sound periodically.

Sign Out

When you are finished with your shift or otherwise done using the vehicle, tap **Status** and then tap **OFF Sign Out**. Do not use the **Rest Break** feature unless you will be returning to duty in the same vehicle during your shift.

If the DVIR feature is enabled, you may be prompted to create a driver vehicle inspection report before signing out.

You may also be prompted to review your logs on the device during sign out. Tap **Yes** to be taken to the log(s) that require review. See **View Logs** for more information. Tap **No** to proceed without reviewing your logs. Tap **Back** to cancel and return to the **Driver Overview**.

After the sign out process is complete, the logging device will send your records to the web server

Software Setup

AssetWorks ELD software v2.2 contains the following applications:

- MDT7 Dock:
  - Programmed with LMU Programmer 2.1.2 or higher
- MDT7:
  - eFleetsuite v1.2.70.0A or higher
  - Vehicle Data Services v2.1 or higher
  - Watchdog v0.53 or higher

Installing all the application completes the software setup to configure the V-Series Dock and V-Series for ELD.

Symbols & Warnings

Engine or Black Box Connection Status

[Green] The logging device is currently connected to your engine or the system black box. All drive time will be recorded correctly.

[Gray] The black box or Vehicle Data Service has stopped sending data to FleetLog. Drive events will not be recorded, and paper logs should be used.

[Red] The connection to the engine has been lost, and drive events will not be recorded. Paper logs should be used.

Web Server Connection Status

[Green] The logging device is currently connected to your wireless data provider and can send data.

[Amber] The connection to your wireless data provider has been closed because the logging device has no new data to send. A connection will be re-established when there is data to send.

[Red] The logging device cannot connect to your wireless data provider. Reasons may include low signal strength or network service interruption.

GPS Connection Status

[Green] The logging device currently has a good lock on GPS.

[Amber] The logging device is connected to some GPS satellites, but not enough to establish a valid position. Location information will need to be entered manually.

[Red] No GPS connection available. Location information will need to be filled in manually.

Logs Pending

The logging device is waiting for driver logs to be synchronized with the web server.

No Trailer

The trailer list is empty.

No Shipment

The shipment list is empty.

Miscellaneous Warnings

[Orange] This icon can represent a few different warnings. Read the text that accompanies the icon to determine what the warning is and if any action is needed

Unknown Driver

The vehicle is moving but the person operating the vehicle has not been identified. Stop driving and either sign in or change status as directed.

Malfunction & Data Diagnostic Event Indicators

See the following tables for ELD malfunction and data diagnostic event definitions. General troubleshooting steps can be found in the **Troubleshooting** section.

Data Diagnostic Event	Code	Description
Power	1	Device was not powered on within 1 min of the engine receiving power, or lost power at any point while the engine was powered on
Engine synchronization	2	Device was not able to receive data from the ECM (or other data source) within 5 seconds of requesting the data
Missing required data elements	3	Device is missing required information for reporting on driver logs
Data transfer	4	Device is unable to confirm the proper operation of the certified primary roadside transfer mechanism
Unidentified driving records	5	More than 30 min of driving in a 24-hour period is recorded under the unidentified driver profile

Compliance Malfunction	Code	Description
Power	P	Device lost power during driving events for a total of 30 min or more over a 24-hour period
Engine synchronization	E	Device lost connection to the ECM (or other data source) for a total of more than 30 min during a 24-hour period
Timing	T	Device is not able to synchronize to UTC

Positioning	L	Device is not able to acquire a valid position measurement within 5 mi of vehicle movement for a total of more than 60 min over a 24-hour period.
Data recording	R	Device is no longer able to record or retain required event data or retrieve locally stored recorded logs
Data transfer	S	Device continues to fail checks of the roadside transfer mechanism for three days following a Data Transfer Diagnostic Event
Other ELD detected	O	The eFleetSuite application has stopped working or is not responding as expected

Data diagnostics appear on your device when a driver is signed into the application. If your device enters a data diagnostic state, you will see a red triangle icon in the action bar at the top of the screen. Navigate to your log events to determine the exact type of diagnostic event that has occurred and see **Troubleshooting** for common causes and resolutions. When viewing your logs, tap the data diagnostic event to view more detail (if available).

An ELD compliance malfunction appears on your device as a pop-up notification icon that sits on top of all applications. The icon will include the malfunction description. The example shown is a Timing Compliance malfunction.

You must document the occurrence of a compliance malfunction and notify your carrier in writing within 24 hours and reconstruct your record of duty status for the current 24-hour period on a paper log. If the malfunction prevents you from accessing your logs on the device, you must reconstruct your previous 7 consecutive days of logs on paper as well.

A compliance malfunction cannot be dismissed, it must be corrected before you continue using the device as an ELD. Refer to the **Troubleshooting** section for common causes and resolutions. If you are not able to immediately resolve the malfunction, you must continue keeping paper logs until the device is once again compliant.

Troubleshooting

See the following tables for common troubleshooting steps.

COMMUNICATIONS

Symptom	Possible Cause	Corrective Action
System Check screen shows "Failed" for Comms; The comms indicator on the Sign In screen is red Driver logs or DVIR cannot be downloaded at sign-in	Antenna connections not solid	Verify the connections are tight, but **finger tighten only**. Turn the antennas toward the nearest window or windshield.
	Cellular coverage issue	Move outside or away from buildings or other objects that may obstruct the signal. Contact the cellular provider of your device and request a coverage check for your area.

GPS

Symptom	Possible Cause	Corrective Action
System Check screen shows "Failed" for GPS. Missing locations appearing on driver logs. "Record State Line Crossings" message on device. Device is recording positioning compliance malfunctions.	Antenna connections not solid	Verify the connections are tight, but **finger tighten only**. Turn the antennas toward the nearest window or windshield.
	Physical location / coverage issue	Move outside or away from buildings or other objects that may obstruct satellite view.

IGNITION

Symptom	Possible Cause	Corrective Action
Device is recording engine synchronization data diagnostics and/or compliance malfunctions. Device is not recording driving time.	Ignition wire incorrectly installed	Verify ignition wire is not receiving power with the engine off and is receiving power with the engine running.
	Device not receiving engine data from ECM	Contact your provider for further assistance.

TOUCHSCREEN

Symptom	Possible Cause	Corrective Action
eFleetSuite stops responding to touches.	Application not responding	Reboot the device by holding the red hardware button until the Power Off menu appears. Tap **Power Off** and then **OK**.
		If the **Power Off** menu will not appear, disconnect the 9-pin or Molex-Molex connector on the wiring harness.
	Defective or damaged touchscreen	Have your carrier administrator submit an RMA request to have the screen repaired.
Screen does not power on with engine crank or when the circular hardware button is pressed.	No power	Verify that the device is receiving power through the 9-pin harness.
	Defective or damaged touchscreen	If the hardware buttons light up but the screen will not turn on when the circular hardware button is pressed, have your carrier administrator submit an RMA request to have the screen repaired.

SIGN IN ERROR MESSAGES

Error Message	Possible Cause	Corrective Action
Driver ID or password is invalid for driver [xxx].	An incorrect ID or password was entered	Contact your administrator to verify your ID and to have your password reset.
Unable to reach host.	No cellular connection and no credentials stored locally on the device	See COMMUNICATIONS section above.

APPLICATION ERRORS

Error Message	Possible Cause	Corrective Action
Device is displaying “Other” compliance malfunction.	Application has stopped responding	Reboot and/or reprovision the device. Contact your provider for further assistance.

ODOMETER

Symptom	Possible Cause	Corrective Action
System Check screen shows “Failed” for Odometer.	9-pin connection not properly installed	Verify the 9-pin connector and any adapters used for installation are connected tightly and snapped into place.

Missing or decreasing odometer conflicts are appearing on driver logs.	Device not receiving engine data from ECM	Contact your provider for further assistance.
Device is recording engine synchronization data diagnostic events and/or compliance malfunctions.	Installation did not use correct cables	Verify that the correct J1708 or J1939 wires were used to connect to the vehicle wiring. Verify that the connection point on the vehicle was not bypassed by some other connection. Verify that the data lines used to connect are live and sending data from the databus.

POWER

Symptom	**Possible Cause**	**Corrective Action**
"Power Failure" remarks appear in driver logs. Device is shutting down or rebooting unexpectedly. Screen does not power on with engine crank or when the circular hardware button is pressed. Device is recording power data diagnostic events and/or compliance malfunctions.	Incorrectly installed power wire or no power to the 9-pin connector power pin	Verify that the power and ground wire are receiving a constant 12 or 24 volts of power with the engine off. Verify that the 9pin connector and any adapters used for installation are connected tightly and snapped into place.
	Inconsistent voltage to the device	Test the vehicle's battery and alternator. Check for faulty wiring; exposed or corroded wiring or loose connections.
	Device is wired through a master kill switch	Re-wire the device straight to a constant 12- or 24-volt source. See Installation Guide for details.

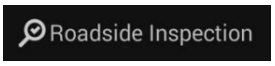
Definitions

The following abbreviations and terms are used in records generated by this logging device. Use the extra space provided to list any additional codes used by your motor carrier.

FSS	Field Service Solutions
Comms	Cellular communications
D	Driving
ELD	Electronic logging device
ELD Login	When an authorized user logs in to an ELD
ELD Logout	When an authorized user logs out of an ELD
eRODS	FMSCA's centralized log retrieval and storage system
Inactive - Changed	A log event that was edited and is no longer the active event
Inactive - Rejected	A requested edit that was rejected and was not applied to your log
Inactive - Requested	A log edit that has been requested by a non-driver host user but has not yet been applied to your log
OFF	Off duty
ON	On duty, not driving
PC	Personal conveyance
SB	Sleeper berth
YM	Yard moves

Instructions for Law Enforcement Officials

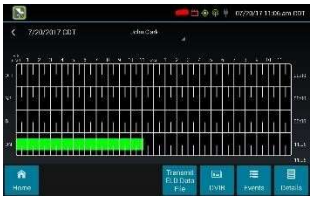
To review the driver's electronic record of duty status (daily log) for each day required to be in their possession[1], tap on **Options** and then tap **Roadside Inspection.**



This will show you the log grid starting with the current day. Tap the **Events/Grid** button to toggle between the grid view and a line-by-line detail view. Use the arrows on either side of the date or swipe the screen side to side to navigate through the log history. The **Details** button displays general carrier, driver, and ELD information. The **DVIR** button will display the most recent approved DVIR and the open DVIR (if applicable). Use the **Data File Transfer** button to send the logs via email or web service.

Grid

- Graph of all duty statuses for each 24-hour period starting at midnight
- Total hours
- The grid is color coded as follows:
  - Personal Conveyance (OFF)
  - Yard Moves (ON)
  - All other statuses



Events (Log Details)

- Duty status changes and locations
- Remarks and annotations
- Exceptions claimed by the driver
- Edits and requested changes
  - See **Definitions** for details
- Malfunction and data diagnostic events
  - See **Malfunction & Data Diagnostic Event Indicators** for more information

[1]See US 49 CFR §395.15(b)(4) and CA SOR-2005-313 §84

Details

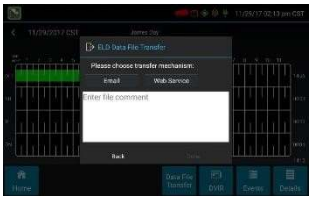
- Log date, time, and time zone
- [Canada format only] The cycle being followed
- Name of motor carrier
- USDOT number of motor carrier
- Main office address
- Driver's home terminal name
- Home terminal address
- Driver name, ID, license number and state
- Co-driver(s)

- ELD Provider, Registration ID, and Identifier
- Vehicles (trucks or tractors), trailers, and shipments
- Distance driven[1]
- Total duty hours for the 7- or 8- consecutive day period [US format] or 7- or 14- day cycle [Canada format] ending today[2]
- Current odometer and engine hours
- Current location
- Malfunction and diagnostic indicators

[1]Excluding any distance travelled while operating a CMV as a personal conveyance
[2]Visible only when viewing a log for the current date

US DATA FILE TRANSFER

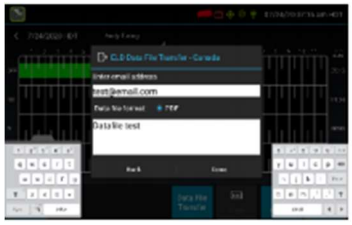
To transmit an ELD Data File for the current 24-hour period and the previous 7 consecutive days to the FMCSA, *ensure the tablet is in the dock and you have a green network connection symbol*. See **Web Server Connection Status**.



Tap the **Data File Transfer** button. Tap to select either **Web Service** or **Email**, enter a comment, and tap **Done** to complete the request and send the file. To allow the eRODS system to transmit the file directly to you, the inspecting officer, enter only your code (such as “US1234” or “IA12345”) in the comments field. Do not include the word “code” or any other text. Per ELD regulations, the email address is hard coded to the FMCSA and cannot be changed. To transmit logs in addition to the 8 days available on the device, contact the carrier to have them submit a transfer from the host website.

The device will notify you that the file has been queued to be sent and will display the response, if available, from eRODS for a Web Service transfer indicating if the data file was received and available for review.

CANADIAN LOG TRANSFER



To email a PDF copy of a Canadian driver’s logs to a Canadian official, tap the **Data File Transfer** button. Enter or select an email address, add an optional comment, and tap **Done** to send the logs. Please note this is not intended for official use in the United States.

Unidentified Driver Events

To view all unassigned unidentified driver events recorded by the device, tap the driver’s name (above the grid) and select **Unidentified Driver**. Use the arrows on either side of the date or swipe the screen side to side to navigate through the log history.

Version History

Name	Date	Version	Notes
Sunny Gill	Apr 24, 2017	1.7	- Created the document from AssetWorks FSS Product User Manual
Rachel Haan	Feb 27, 2018	2.0	- Edited Document for V-Series MDT7 Dock – Hardware 2 configuration
Rachel Haan	May 11, 2018	2.1	- Roadside Inspection Updates (ELD Data File Transfer)
Rachel Haan	April 2, 2019	3.0	- Roadside Inspection Updates (ELD Data File Transfer) network requirements addition - Update DVI section - Minor updates from latest version of ISE Driver Manual (A317 Driver Guide v11.doc) - Add “Troubleshooting” section
Marie Howell	August 13, 2019	3.1	- Add “Editing Logs” subsection
Marie Howell	August 14, 2019	4.0	- Add “Hardware Config 3: Know Your AWELD MDT7 & ME3640 Device” - Add “Preparing/Planning for Installation” subsection - Add “Driver Role Selection” & “Pre-Defined Annotations” - Add “Personal Conveyance (PC) and Yard Moves (YM)”
Pam Popik	Sept 22, 2020	5.0	(A317_DGv15) - Page 38 - added instructions for Canadian log transfer - Page 46 - added "eRODS" to abbreviation definitions - Page 48 - clarified US data file vs. Canadian log transfer, added instructions for sending Canadian logs