

AssetWORKS

**USER MANUAL**

**ELD 1.3**

**Field Service Solution Application**

**15 November 2019**



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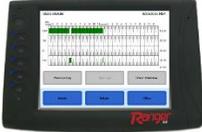
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# USER MANUAL

## Hardware User Guide

Ranger	
Device	 <p>Ranger</p>
Connection Points for ECU	Wired to ECU via Cable
Light Duty Vehicle	 <p>OBDII Streamer</p>
	 <p>OBDII ECU Connection Cable</p>
Heavy Duty Vehicle	 <p>6 or 9 Pin connector cable<sup>1</sup></p>

<p><b>Installation Cables</b></p>	 <p>Ranger Main Harness (Ranger Octopus Cable)</p>  <p>Ranger to HDV Connector Cable</p>  <p>Ranger Coil Cable</p>  <p>Ranger Power Cable / Fuses</p>
<p><b>Mounting Hardware</b></p>	

## Vehicle Installation

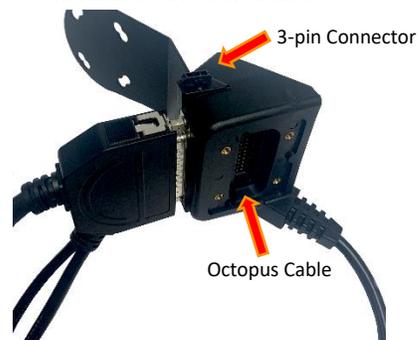
### Ranger Installation

#### Ranger Power Installation and Mounting

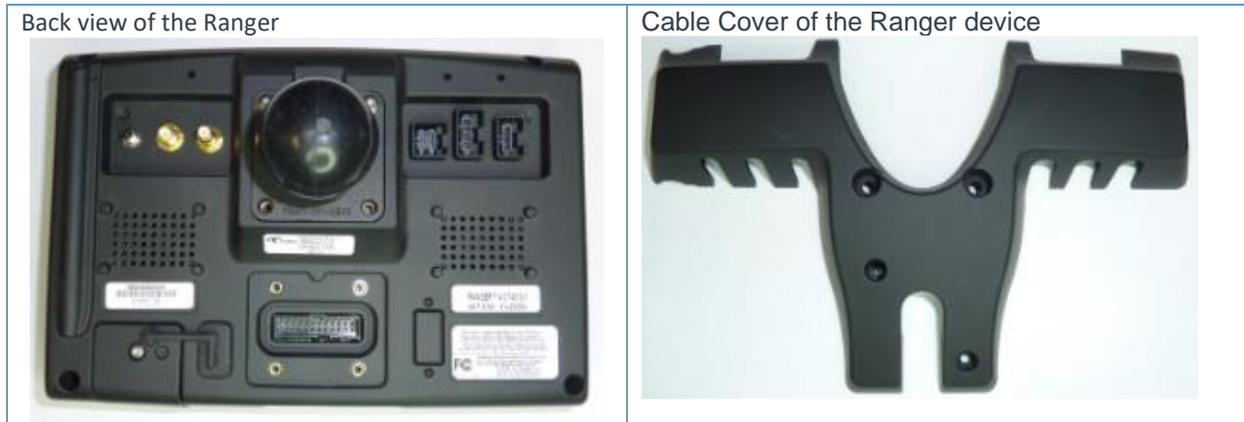
- Drill four holes in the front plate of the dash (3/16" drill bit size)
- Attach the ball mount to the dash, with the Coil Cable mount in between the dash and ball mount.
- Drill 1 ½" hole next to the dash mount for wiring
- Run the Ranger Octopus Cable through the hole
- Mount the standard length arm on the 2.5" base ball



- Run the power cable for the Ranger from the battery to the dash
  - Power Lead (Red) to +12V
  - Ground Lead (Black) to GND
  - Connect in-line 3A fuse on the power lead (Red)
- Connect the 4-pin Molex of the Ranger power cable to the Ranger Octopus Cable
- Connect the green wire of the Ranger Power cable to the ignition switch (Green)
  - NOTE: Do **not** connect to the accessory mode of the ignition switch
  - Connect in-line 2A fuse on the ignition lead (Green)
- Connect the Ranger Octopus Cable to the back of the Coil Cable



- For HDV (Heavy Duty Vehicle) connect the 3-pin connector of the *Ranger to HDV Connector Cable* to the 3-pin connection on the back of the Coil Cable. Connect the 3-pin connector from the coil cable to the back left side of the Ranger
- Place the cable cover on the Ranger



To install the Ranger Cable Cover:

- Use 2mm screws as shown in the following graphic to fasten the Power Cable Cover Plate. This requires a 2mm Hex bit. Apply torque to the main cable cover screws to 80 - 90 oz-inches (55 - 65 N-cm)



- Align the Cable Cover with the Ranger unit



- If there are external cables connected to the Ranger unit, thread the cables through the holes in the Cable Cover. The cables must be threaded in such a way that they are not pinched by the Cable Cover when fastened to the Ranger.



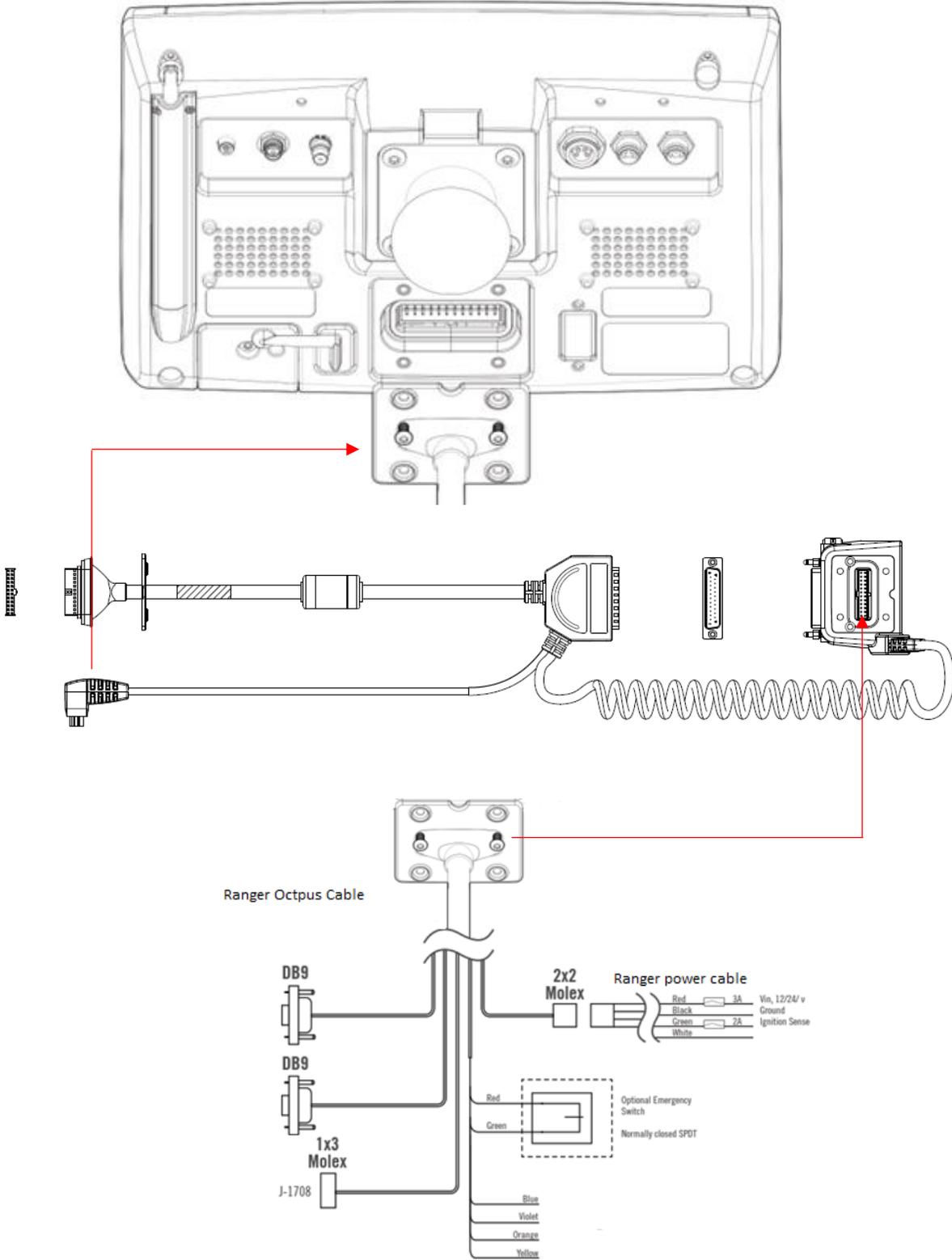
- Secure the Cable Cover to the Ranger unit with the screws provided. This requires 6mm and 2mm hex head screws (2 of each). Apply torque to the mounting ball and RF cable cover screws to 80 – 90 oz-inches (55 - 65 N-cm)



- If an HSPA or LTE modem is selected, a SIM card must be installed into the unit as shown in the following graphic

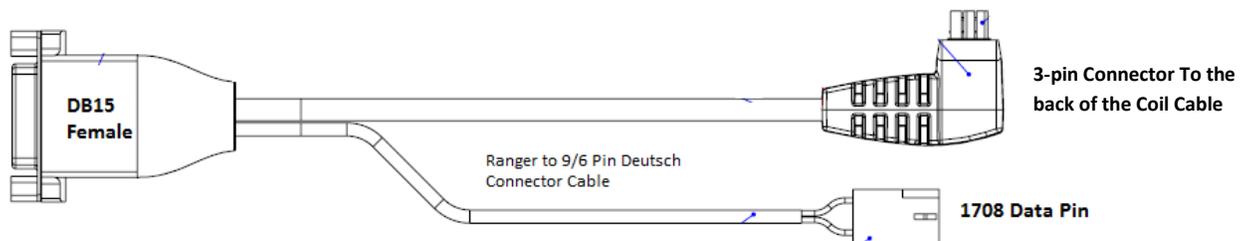
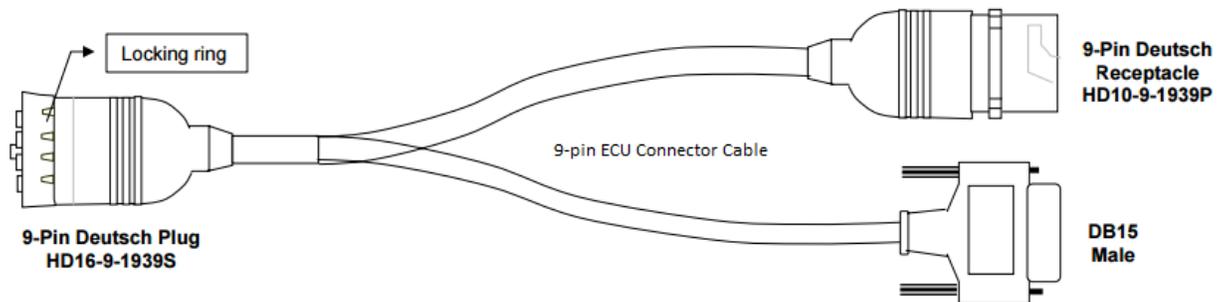


- The card should “click” into place when installed correctly. It can be ejected by pushing it inwards until a “click” is heard and then released. The SIM can then be removed.



## Ranger Installation for HDV

- Connect the Ranger 9-pin / 6-pin Deutsch plug to the Vehicle ECU
- The Y-cable shall have a 9-pin / 6-pin Deutsch Receptacle that can be replaced on the Vehicle ECU Port under the dash
- Tuck the Ranger cable behind the vehicle dash out of the way of the driver



- Connect the DB15 Male of the *9-pin ECU Connector Cable* to the DB15 Female of the *Ranger to 9/6 Pin Deutsch Connector Cable*
- Connect the 3-pin Connector from the *Ranger to 9/6 Pin Deutsch Connector Cable* to the back of the Coil Cable



- Connect the 1708 Data Pin (if necessary) to the J-1708 1x3 Molex plug of the Ranger Octopus cable
  - Only required on vehicles that do not provide J-1939 data

## Ranger Installation for LDV

- Connect the *OBDII ECU Connection Cable* to the Vehicle ECU
- The Y-cable has a OBDII Receptacle that can replace access to the Vehicle ECU Port under the dash
- Tuck the Ranger cable behind the vehicle dash out of the way of the driver



- Connect the DB15 Male connector of the *OBDII ECU Connection Cable* to the OBDII Streamer



- Connect the DB9 Male Connector (labelled COM1) of the *Ranger Main Harness* to the OBDII Streamer



- Turn the vehicle ON, Both lights (status and power) on the OBDII streamer should go solid
- Once the OBDII Streamer connection is confirmed (check "System Status" in Ranger Start Menu), tuck the streamer behind the dash out of the way of the driver

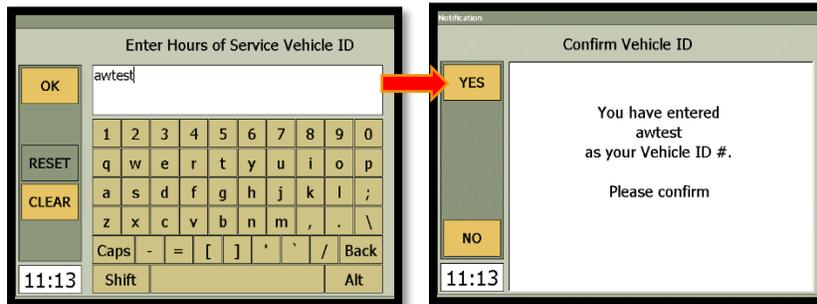
## Software Setup

### Provision Ranger for ELD

#### Provisioning Ranger

Provisioning the Ranger activates the Ranger as an hours of service (HOS) vehicle. This means drivers who use hours of service logs can access their driver logs through this device.

When the Ranger is powered on for the first time, an 'Enter Hours of Service Vehicle ID' screen is displayed where you will enter the vehicle ID. Click 'OK' when you are finished entering the vehicle ID. Confirm the entry and click the 'YES' button to finish the provisioning process.



The Device ID, Organization ID and Provisioning Key are hard coded into the Mobile application installed on the Ranger. Once you confirm the Vehicle ID, the following screen will display while the Ranger completes the provisioning process.



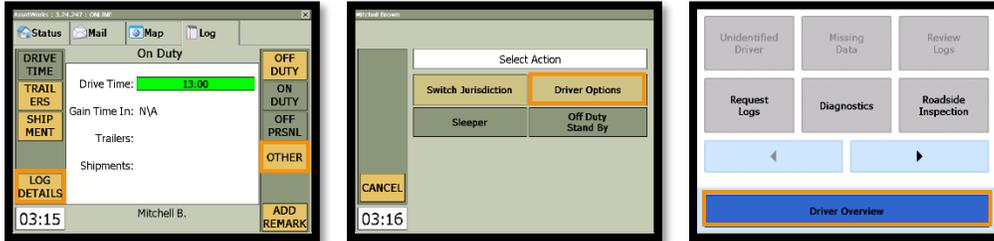
When provisioning is completed the Ranger will display the LOGON screen



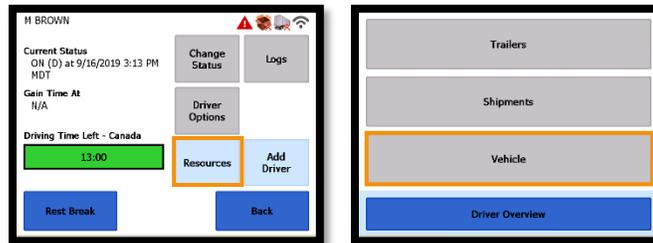
## Re-Provisioning Ranger

It may be necessary to change the vehicle ID because it was entered incorrectly, or the ranger changed vehicles.

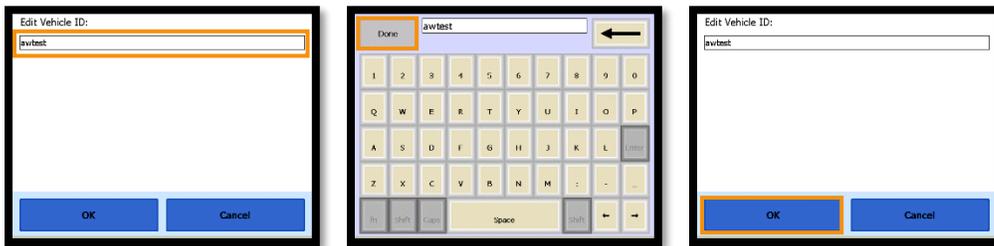
To re-provision the ranger, click 'OTHER', then 'Driver Options', then 'Driver Overview'.



Click on 'Resources', then 'Vehicle'.



Click on the textbox to change the vehicle ID. Click 'Done' when you are finished entering the new ID. Click 'OK' to complete the process.



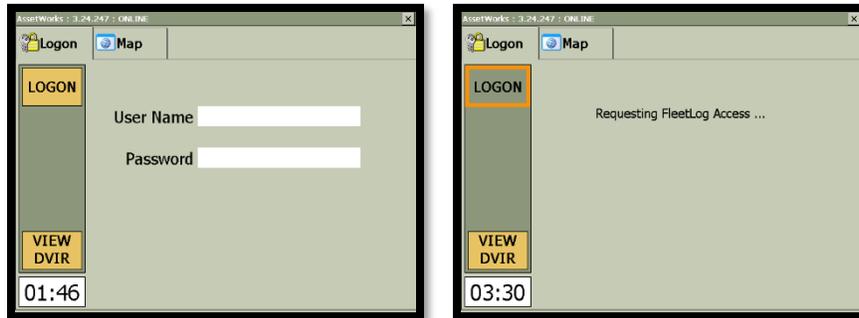
To return to the Mobile Application click 'Driver Overview' then 'Back'.

## Software User Guide

### Ranger ELD User Guide

#### LOGON

Enter the Driver ID and Password by clicking the 'LOGON' button, or within the white text box beside 'User Name'. Once your username and password have been entered, click the 'LOGON' button to initiate the logon process.



#### Logs are up to date

When the logs are up to date the Ranger is connected to the server and previous logs are available on the Ranger.

**Driver:** Ensure driver name is correct

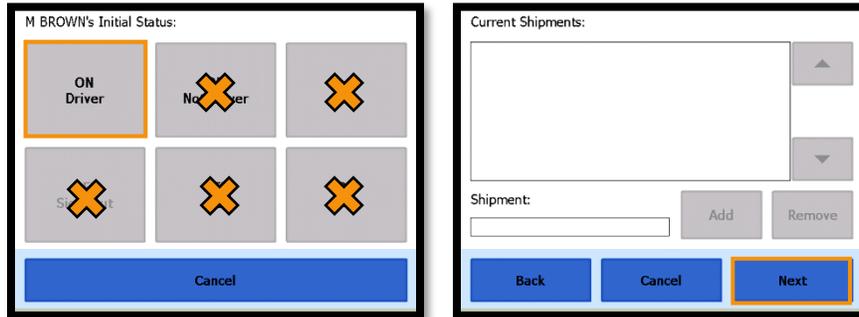
**Last Status:** Ensure the last status is correct as it will affect Gain Time and Driving time left.

**Gain Time:** The Ranger will indicate the date and time when there will be a gain in drive time if available.

**Driving time left:** The number of hours you have available to drive within the set duty cycle.

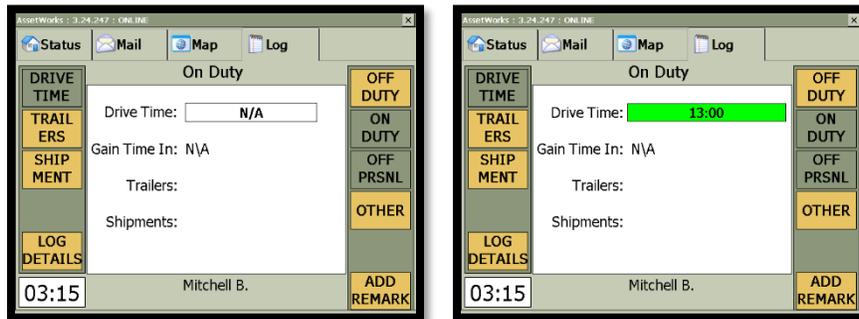


Click 'NEXT' and select 'ON Driver' – this will set your duty status to **ON DUTY**. You can then enter shipments on the next screen. Click 'NEXT' when finished to complete the log in process.



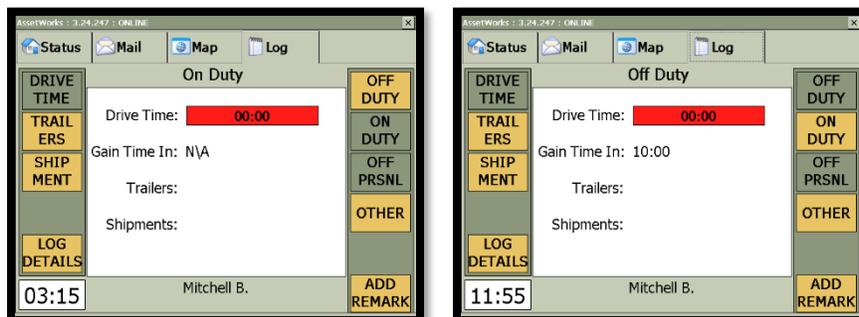
**Driving Time Left: N/A** – This is normal if the Driver is new to the system and logging on for the first time. The information here will update once there is enough information about the work cycle to calculate the values.

**Driving Time Left: XX:00** – The driver has their XX Drive Time available.

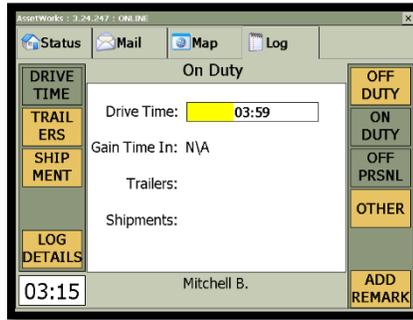


**No Driving Time Left and Gain Time In: N/A** – The driver should sync the Ranger with the server to obtain proper logs. See 'Request Logs'. The driver must also be in an Off Duty status to see gain time.

**No Driving Time Left and Gain Time In: 10 hours** – Gain time will only show when the driver is 'OFF DUTY'. The driver will need to stay in an Off Duty status until their gain time has reached 00:00 to get their full drive time back.



**Drive Time Warning: Only 4 hours of Drive Time left.**



**Drive Time Second Warning: Only 1 hour of Drive Time left.**



*Location Data Entry*

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, the driver will be prompted to enter the location.

**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 the driver logs to provide additional context for your activities. See 'View Log Details' on page 23.

**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.

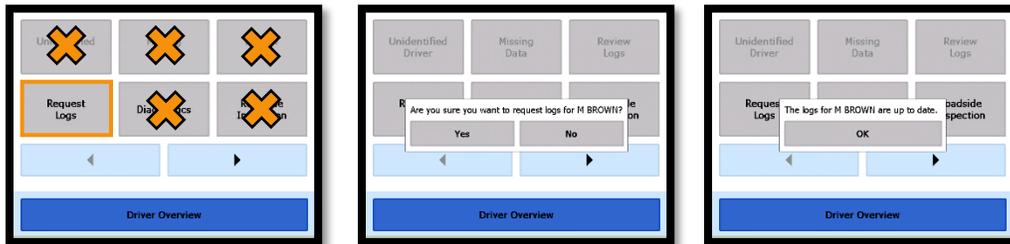


## Driver Options

### Request Logs

If the driver had a conflict, or for some other reason the logs needed to be updated on the server, the driver's logs can be downloaded immediately to the Ranger. It is important to have the most current information available on the Ranger. To request logs:

1. Click 'OTHER' from the main FSS Mobile Log screen.
2. Click 'Driver Options'
3. Select 'Request Logs'
4. Click 'YES' to confirm the request
5. Once the logs are downloaded the Ranger will display a message box indicating the logs are up to date.

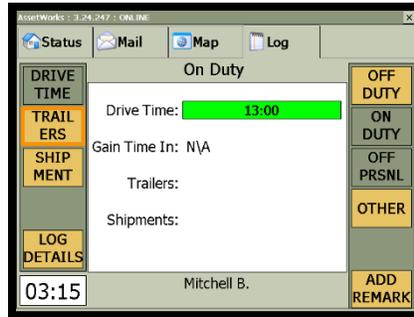


To return to the Mobile Application click 'Driver Overview' then 'Back'.

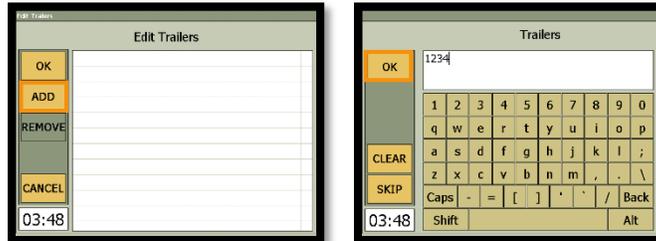
## Add or Remove Resources

You can add Trailers and Shipments through the 'TRAILERS' and 'SHIPMENT' buttons located on the left-hand side of the Log screen.

### Trailers



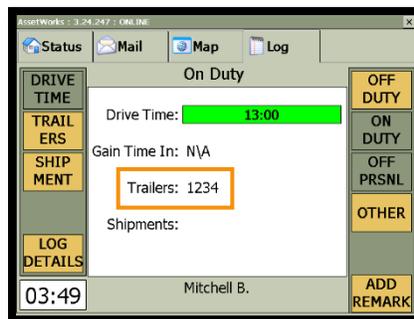
**Adding a Trailer:** Click the 'TRAILERS' button then 'ADD'. Click 'OK' when you are finished entering the trailer name.



**Removing a Trailer:** Click the 'TRAILERS' button and highlight an existing Trailer in the list. Select 'REMOVE'.



Added Trailers will appear on the Log View Summary Page



Shipments



**Adding a Shipment:** Click the 'SHIPMENT' button then 'ADD'. Click 'OK' when you are finished entering the shipment.



**Removing a Shipment:** Click the 'SHIPMENT' button and highlight an existing Shipment in the list. Select 'REMOVE'.



An added Shipment will appear on the Log View Summary Page

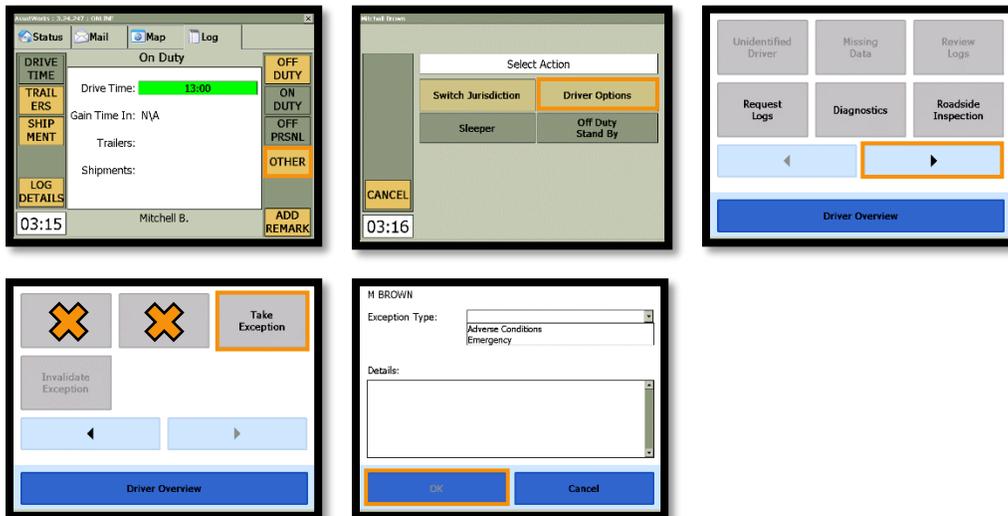


## Add a Remark or Exception

**To add a remark:** From the Log screen, click the 'Add Remark' button on the bottom right. Type Driver Remarks as needed. Click 'OK' to complete the remark.



**To add an Exception:** Click 'OTHER' then 'Driver Options'. Tap the arrow pointing to the right, then click 'Take Exception'. Choose an Exception from the drop down and enter the details below. Click 'OK' when done.



To return to the Mobile Application click 'Driver Overview' then 'Back'.

## Change Status

From the Log Screen a driver can change statuses between the following:



**Off Duty:** Choose this when you are relieved of duty before signing out of the logging device. This will record your activity as OFF.

**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 (driving) when the vehicle is moving, and ON 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.

**Off Personal (OFF PRSNL):** 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.”

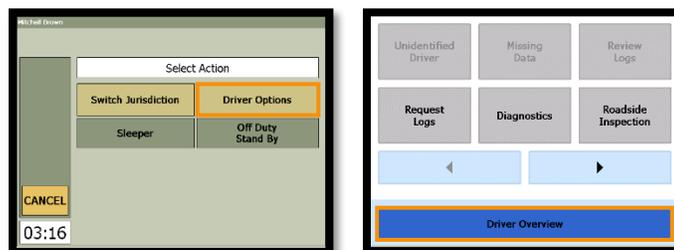
From the ‘OTHER’ button on the log screen, a driver can change statuses between the following (if enabled by the carrier):



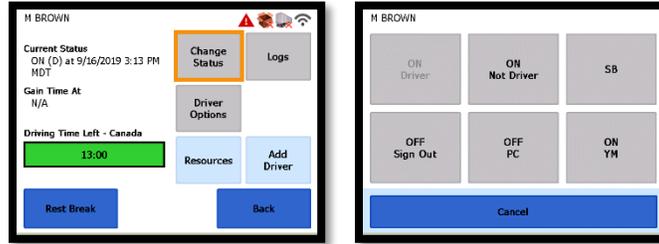
**Off Duty Stand By: If applicable:** Choose this while you are waiting at an oil or natural gas well site and are performing no work during this time. This will record your activity as waiting/standby time.

**Sleeper:** Choose this when you are beginning a period of rest in the vehicle’s sleeper berth. This will record your activity as SB

Drivers can select additional status options by clicking on ‘Driver Options’, then ‘Driver Overview’.



By clicking 'Change Status', an On Duty driver can change statuses between the following:



**On Yard Move (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). (If enabled by the carrier).

**On Duty (ON Not Driver):** Choose this if you are on duty but not in control of the vehicle. This will record your activity as ON. 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.

‘ON Driver’, ‘SB’, ‘OFF Sign out’, and ‘OFF PC’ can also be selected from this screen, which are explained above.

## Co-Driver

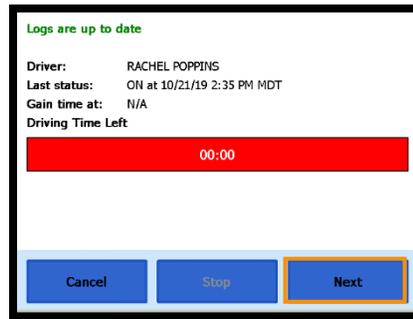
In some situations, the driver is a Co-driver (team driver) who has been, or is about to be, the driver:

### Signing in a Co-Driver

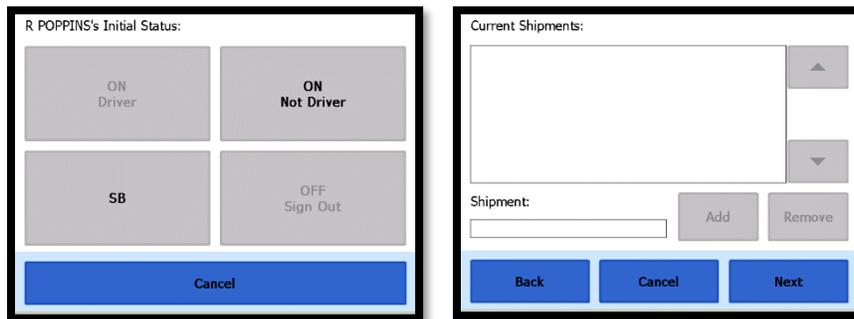
To add a Co-driver, click 'ADD DRIVER', enter the username and click 'OK', then enter the password and click 'OK'.



The 'Logs are up to date' screen will appear. Click 'Next' to download logs onto the Ranger.

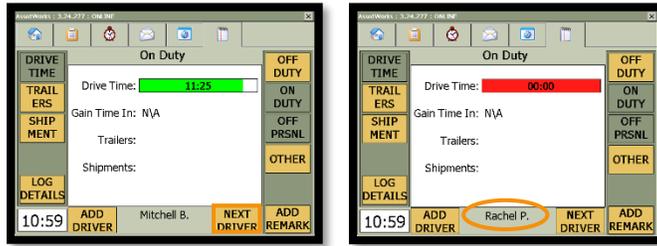


The added driver can then select either an 'ON Not Driver' or 'SB' status. They may also add shipments.



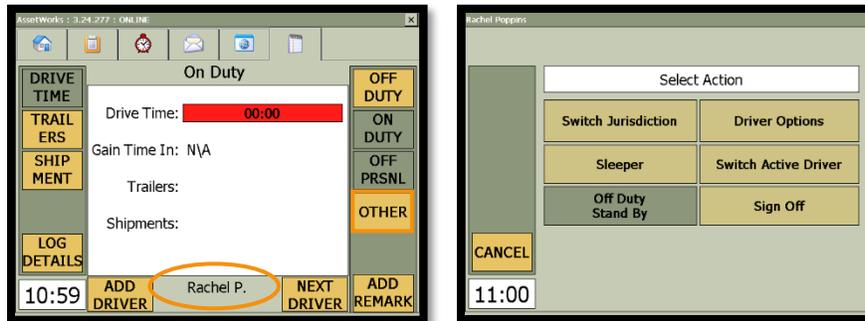
Up to 5 drivers may be added.

To select a specific driver, click 'NEXT DRIVER' until the desired driver's name appears at the bottom of the screen.



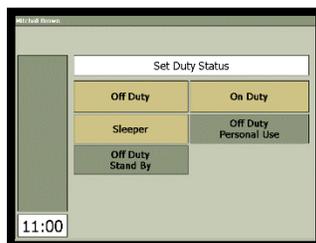
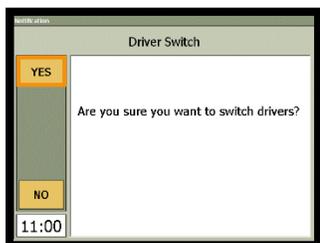
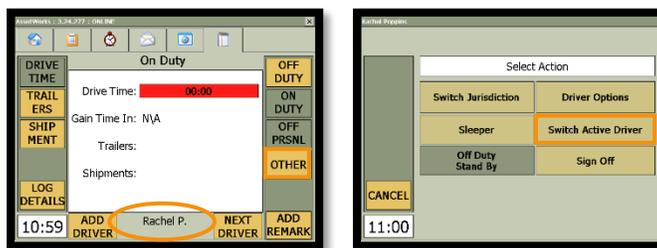
### Change Status as a co-driver

To change the co-driver status, click 'NEXT DRIVER' until the desired co-driver's name appears at the bottom of the screen, then click 'OTHER'. As an On-Duty co-driver you may choose to switch your jurisdiction, switch the active driver, go on Sleeper status, or sign off.



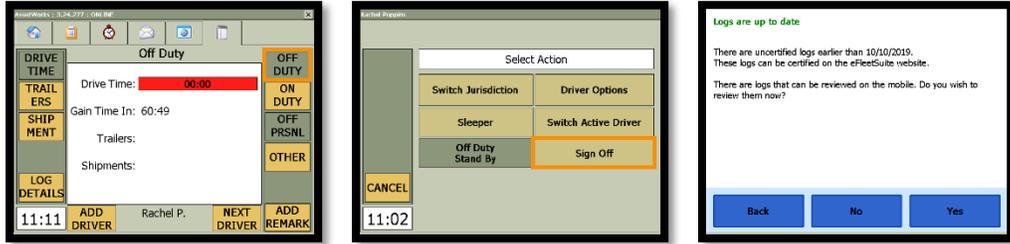
### Switch Active Drivers

To change the active driver, click 'NEXT DRIVER' until the desired co-driver's name who will become the active driver appears at the bottom of the screen, then click 'OTHER'. Click 'Switch Active Driver'. You will then have to select either an Off Duty, On Duty, or Sleeper status for the driver being switched off Active Driver.



## Sign off Co-driver

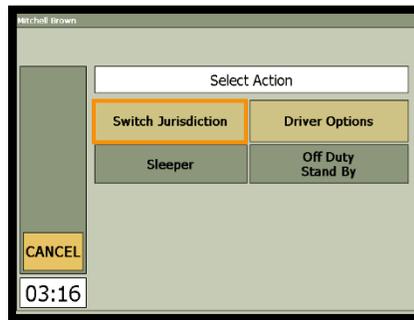
Select the Co-driver using the 'NEXT DRIVER' button until their name appears at the bottom of the screen. Then click 'OFF DUTY'. To sign out, click 'OTHER', then 'Sign Off'. The Co-driver will be given a chance to then review their logs on the Ranger.



## Switch Jurisdictions

Some drivers may travel between the USA, Canada and/or Mexico, and will have the option to switch jurisdictions if applicable.

Click the 'OTHER' button from the Driver Log tab then 'Switch Jurisdiction'.



Double-click on the 'Driving time left - <Country>' bar to view the 'Driving Time Details - <Country>' screen. Click on 'Switch to <Country>' to enable a different jurisdiction.



To return to the Mobile Application click 'Driver Overview' then 'Back'.

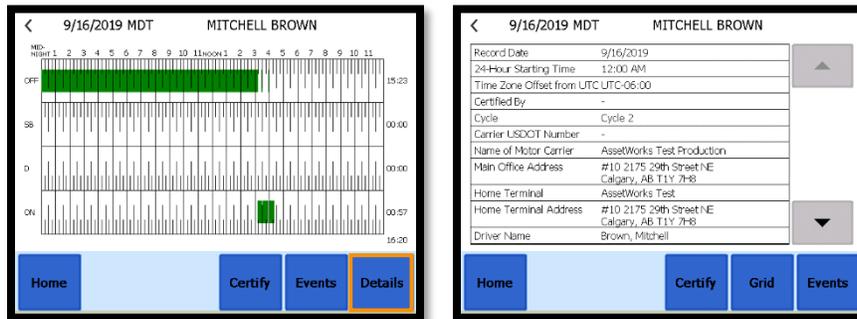
## View Log Details

To view the Grid and previous day's data, click the 'LOG DETAILS' button from the mobile application. This will take you to the hours of service application.

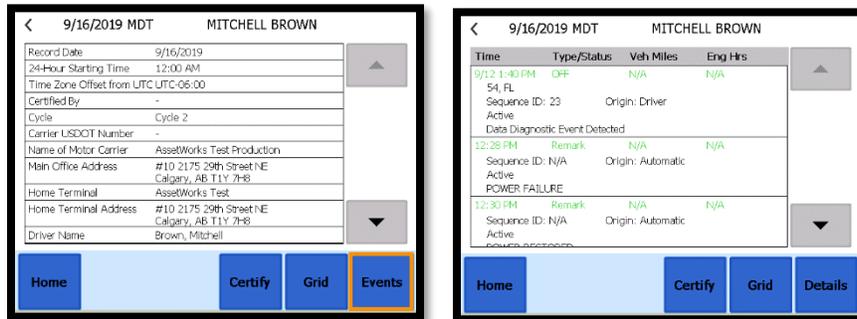


### For Log Details and Events

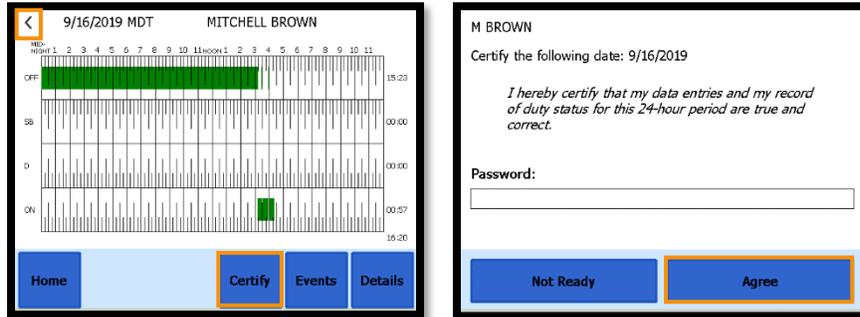
Click 'Details' to View additional information including Distance Driven, cycle type, co-drivers, trailers and shipments.



Click 'Events' to see duty status changes and locations, remarks and annotations, exceptions claimed, log edits, unidentified driver events, and malfunction and data diagnostic events.



You can view previous day's data by tapping on the back arrow in the top left-hand corner. You can certify each day's log by clicking 'Certify', entering your password, then clicking 'Agree'.



To return to the Mobile Application click 'Home' then 'Back'.

## Vehicle in Motion

When the vehicle is in motion the Ranger will show one of the following blocker screens; Clock, Blank, Map, or Application.



## Daily Vehicle Inspection Reporting (DVIR)

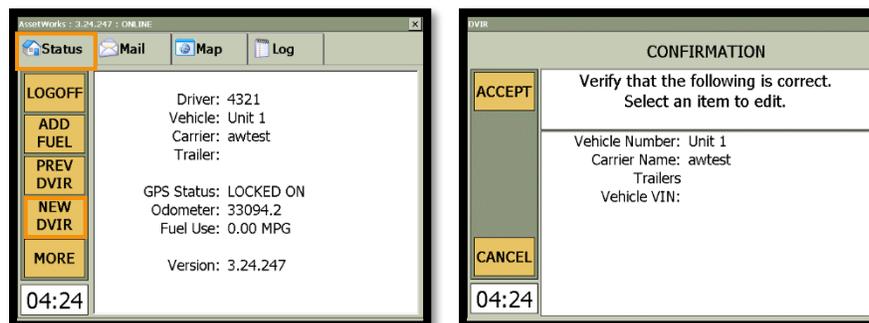
**Major Defects:** Specific alerts can be generated for major defects. This is the most critical item as your vehicle is not considered roadworthy.

**Minor Defects:** Specific alerts can be generated for minor defects. These are less critical items and you may want these alerts to go to a different person/group for consolidation.

### New DVIR

The 'NEW DVIR' button allows the driver to complete a new DVIR.

From the STATUS tab, click on 'NEW DVIR' and it will take you to the 'CONFIRMATION' screen. You will be given a chance to confirm that the vehicle/trailer information is correct here. If the previous DVIR had no deficiencies, the device will take you to the 'CONFIRMATION' screen.

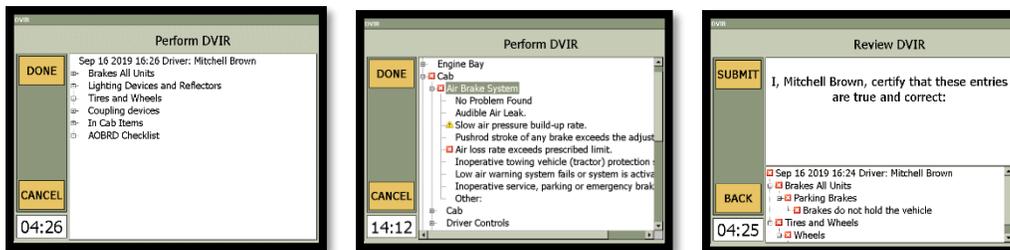


If there were defects in the previous DVIR, those defects must be certified by the driver in order to be corrected. The driver can either certify repairs for the defects or certify that the vehicle is still safe to operate with those defects.



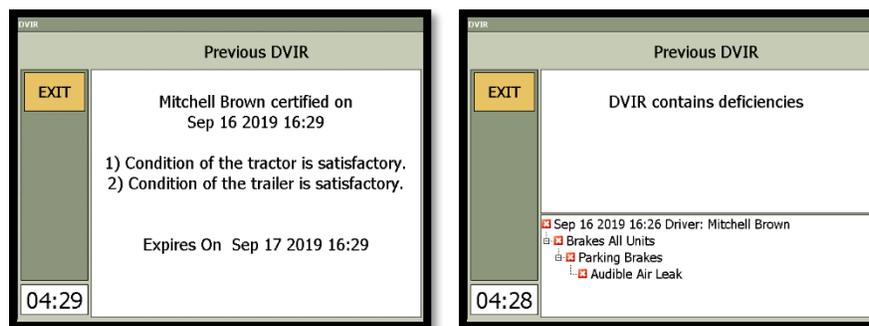
You can perform the new DVIR after certifying previous defects to be corrected and accepting that the vehicle/trailer information is correct. The list will default all items to be "OK". If a deficiency is found, you can use the selection tree to confirm the defect(s) before indicating 'DONE'.

A red "X" denotes a major defect where the vehicle is not considered roadworthy. A "yield" sign indicator denotes a minor defect, where the vehicle can continue to operate. You are given an opportunity to review and certify that the information is correct before submitting the DVIR.

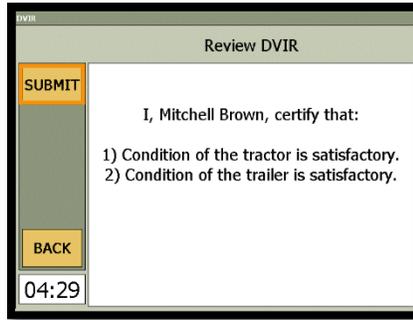


*Previous DVIR*

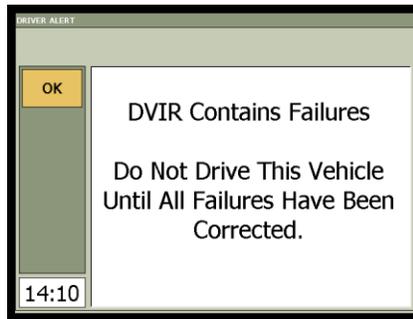
The 'PREV DVIR' button allows the driver to see the last DVIR performed for the vehicle.



If NO defects were noted then the following message will appear. Click 'SUBMIT' to finish the DVIR.

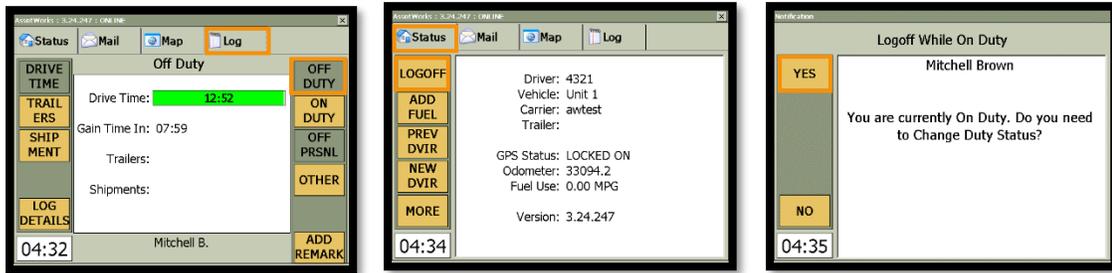


If a major defect is noted, then the "DVIR Contains Failures" driver alert will pop up. System alerts can be sent out in real time to a configurable email list to notify your carrier of these defects.



## LOGOFF

When logging off of the Ranger select the Off Duty Status from the Log tab, then select 'LOGOFF' from the Status tab. If not, the Ranger will prompt you at logoff to change your duty status to off duty.



## Symbols & Warnings

The logging device is currently connected to the wireless data provider and can send data.



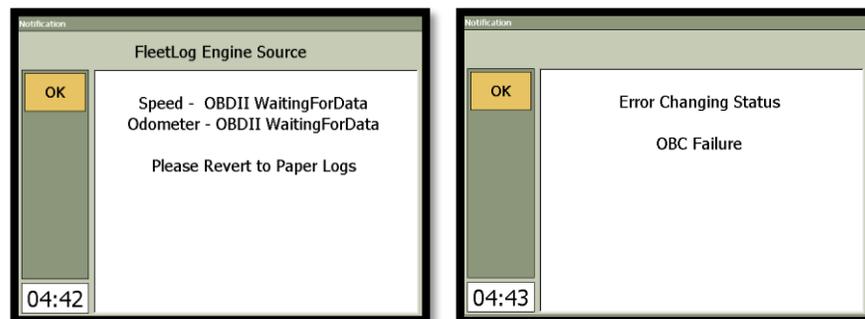
The logging device cannot connect to the wireless data provider. Reasons may include a low signal strength, faulty SIM card or network service interruption.



There are no Trailers or Shipments associated with the current Driver.



The logging device cannot read data from the Engines ECU

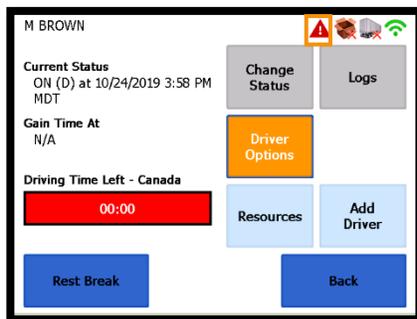


## Malfunction & Data Diagnostic Event Indicators

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.

An ELD compliance message appears on the Ranger at the bottom of the screen on the log tab, the log tab will also be highlighted orange if you are on any other tab. The message will include the malfunction description. The example shown is an Engine Synchronization 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
Top of screen shows "Connection to Dispatch Center Broken"	SIM card not seated correctly or not active	Check with the carrier if the SIM card is active, reseal the SIM card, reset the Ranger
The comms indicator on the eFleetSuite screen is grey instead of green  Driver logs or DVIR cannot be downloaded at sign-in	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.	Sim card not seated correctly or not active	Check with the carrier if the SIM card is active, reseal the SIM card, reset the Ranger
"Record State Line Crossings" message on device.  Device is recording positioning compliance malfunctions.	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.	Ignition wire incorrectly installed	Verify ignition wire is not receiving power with the engine off and is receiving power with the engine running.
Device is not recording driving time.	Device not receiving engine data from ECM	Contact your provider for further assistance.

**TOUCHSCREEN**

Symptom	Possible Cause	Corrective Action
Screen stops responding to touches.	Application not responding	Reboot the device by performing a 3-finger reset. Hold the power button, F2, and F5 at the same time until all the lights on the buttons turn green. The Ranger will then reboot. Disconnect the J1939 connection from the ranger and perform a 3-finger reset.
	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
Logon Denied	An incorrect ID or password was entered	Contact your administrator to verify your ID and to have your password reset.
	The vehicle is not set up correctly on FSS	Contact your administrator to verify that the correct ranger is setup in the vehicle on the FSS website
Unable to retrieve logs.	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.

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.	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 9-pin connector and any adapters used for installation are connected tightly and snapped into place.
Device is shutting down or rebooting unexpectedly.	Inconsistent voltage to the device	Test the vehicle's battery and alternator. Check for faulty wiring; exposed or corroded wiring or loose connections.
Screen does not power on with engine crank or when the circular hardware button is pressed.	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.
Device is recording power data diagnostic events and/or compliance malfunctions.		

## 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.

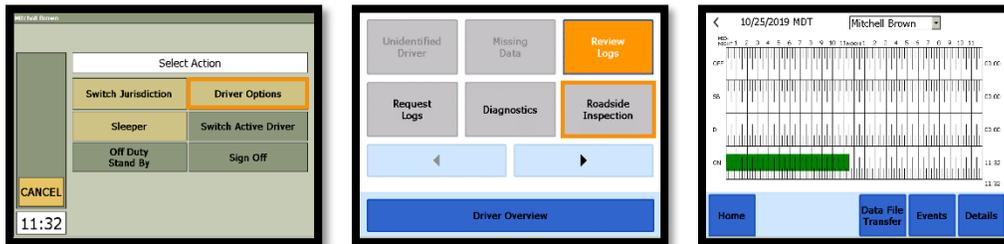
FSS	Field Service Solutions
Comms	Cellular communications
D	Driving
ELD	Electronic logging device
ELD Login	When an authorized user logs in to an ELD
ELD Logout	When an authorized user logs out of an ELD
Inactive - Changed	A log event that was edited and is no longer the active event
Inactive - Rejected	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 remove the ranger from the vehicle, pinch the tabs on both sides of the 25-pin connector and pull, then loosen the mounting hardware.



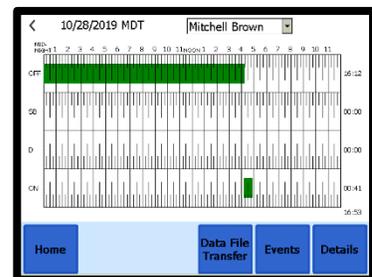
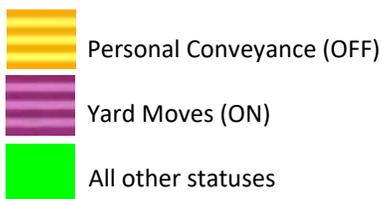
To review the driver's electronic record of duty status (daily log) for each day required to be in their possession, tap on 'OTHER', then 'Driver Options', then 'Roadside Inspection'.



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 to navigate through the log history. The 'Details' button displays general carrier, driver, and ELD information. 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:



## 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



<sup>1</sup>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<sup>1</sup>
- Total duty hours for the 7- or 8- consecutive day period [US format] or 7- or 14- day cycle [Canada format] ending today<sup>2</sup>
- Current odometer and engine hours
- Current location
- Malfunction and diagnostic indicators



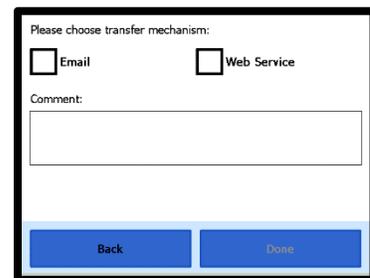
<sup>1</sup>Excluding any distance travelled while operating a CMV as a personal conveyance

<sup>2</sup>Visible only when viewing a log for the current date

To transmit an ELD Data File for the current 24-hour period and the previous 7 consecutive days to the FMCSA, ensure the Ranger is currently connected to the wireless data provider and can send data. See **Symbols & Warnings**.

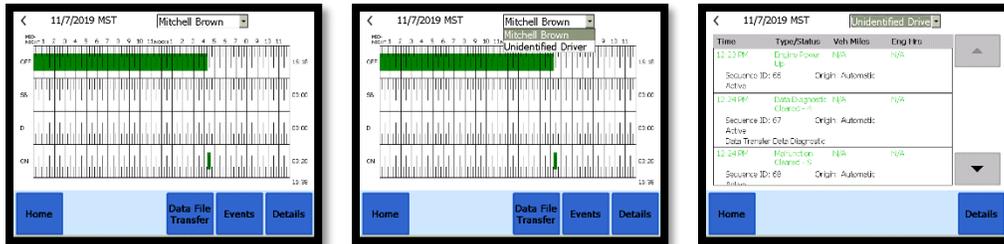


Tap the 'Data File Transfer' button. Tap to select either **Web Service** or **Email**, enter a comment, and tap **Done** to complete the request and send the file. To allow the eRODS system to transmit the file directly to you, the inspecting officer, enter only your code (such as "US1234" or "IA12345") 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.



## Unidentified Driver Events

To view all unassigned unidentified driver events recorded by the device, tap the drop-down arrow beside the driver's name (above the grid) and select **Unidentified Driver**. Use the arrows on either side of the date to navigate through the log history.



Ensure the 25-pin connector clicks back into place once the roadside inspection is over.



## Version History

Name	Date	Version	Notes
<b>Rachel Haan</b>	Aug 12, 2019	1.0	- Created the document
<b>Mitchell Brown</b>	Sept 16, 2019	1.1	- Changed screenshots to be current, updated document to reflect all WO 3.24 changes.
<b>Mitchell Brown</b>	Nov 5, 2019	1.2	- Added Malfunctions and Data Diagnostics section - Added instructions for Law Enforcement Officials section
<b>Mitchell Brown</b>	Nov 15, 2019	1.3	- Added coil cable photos, installation instructions, and law enforcement instructions for coil cable