RADICAL ELD

USER MANUAL

HANDBOOK

www.radicaleld.com

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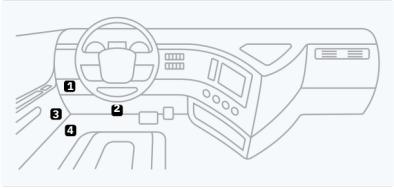
Installation & Connection

Install the RadicalELD device in your vehicle

1. Locate the diagnostic port inside the vehicle with the engine off.
   It is located in one of the four places:



2. Connect the device to the vehicle's diagnostic port.

3. Once the device is installed, verify its proper operation by checking for a blinking green LED light. The green light will begin flashing once the GPS and cellular connection is established.

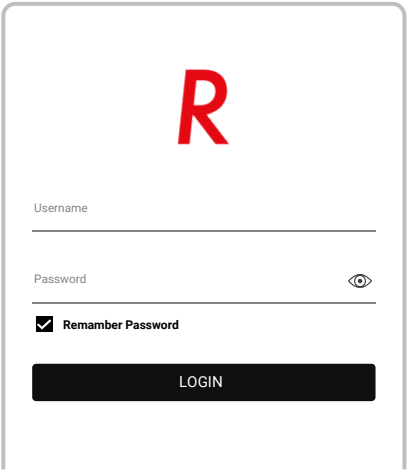
4. Place your device away from any electrical components.
   (they may cause interference).

Installation & Connection

Install the RadicalELD App

1. For Android phones and tablets, download the RadicalELD app from the Google Play Store. For iPhones and iPads, download the RadicalELD app from the App Store.

2.Open the ELD App.



Login to the RadicalELD App and select a vehicle

Check your email for the login details. If you haven't received them or can't remember them, please reach out to your Carrier administrator for assistance.

1. Please enter your login details and click "**LOG IN**." You will then be presented with the Terms and Conditions.
2. Review the Terms and Conditions and click **AGREE**.
3. Choose your vehicle from the list or search for it.
4. Click **ACCEPT**, and you'll be taken to a Settings page where you can review and adjust the settings.
5. Tap **SAVE**.

Dashboard View
After successfully login & vehicle selection, the Dashboard page is open. Use **Tap to Connect** bar to connect to your vehicle.

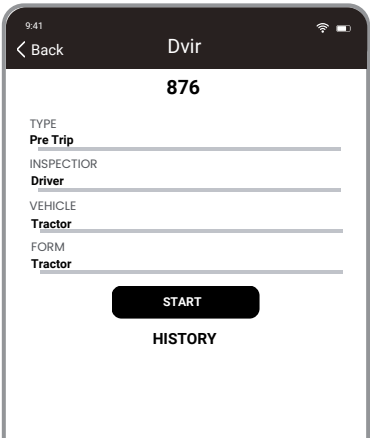
Installation & Connection

Complete Pre-Trip DVIR

Start a new pre-trip inspection report by tapping the **DVIR** button.

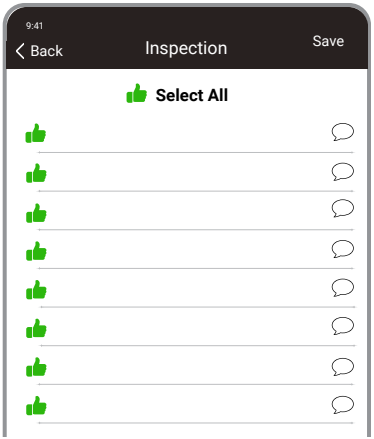
1. Tap the **DVIR** button at the bottom of the screen.

If you are in **Off Duty** or **Sleeper Berth** status, you will be automatically switched to **On Duty** status. Pre-trip is selected by default.



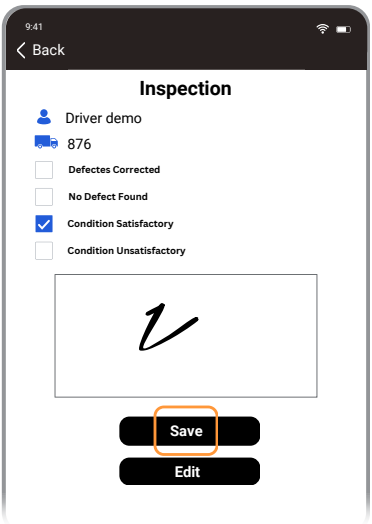
2. Select the form and press on **inspect**.

3. Select all **checkboxes** and then save.



4. Select vehicle **condition**.

5.Add **signature** and finish DVIR.

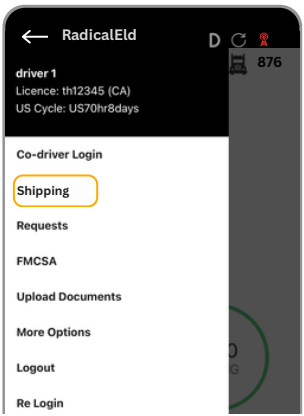


6.Click on **save button** to complete DVIR

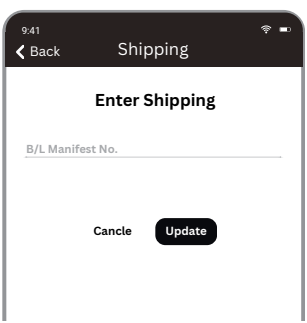
Installation & Connection

Enter Shipping

1. Open the **left side** menu
2. Press **shipping**



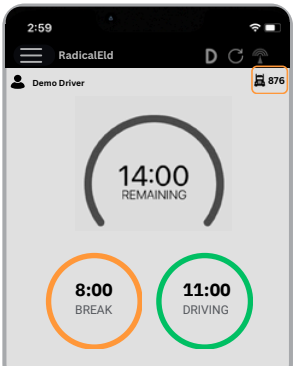
3. Enter **Shipping number**.
4. Press **update** button.



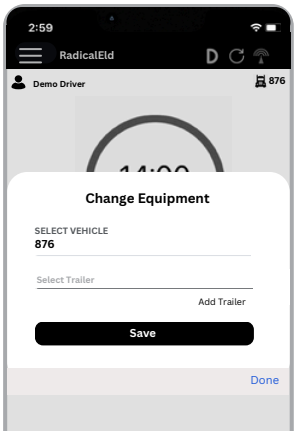
Installation & Connection

Choosing a Vehicle or Trailer.

1. Press Vehicle icon next to your name.
2. Press **vehicle Name** and **select Vehicle**.



3. Press **Trailer Name** and select Trailer.
4. Press the **Save** button

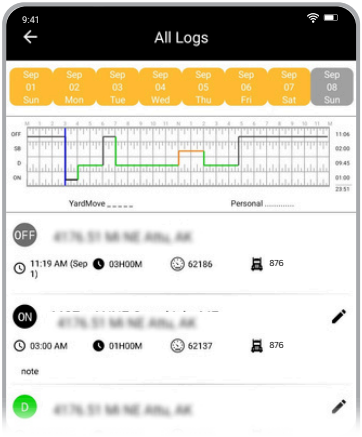


Installation & Connection

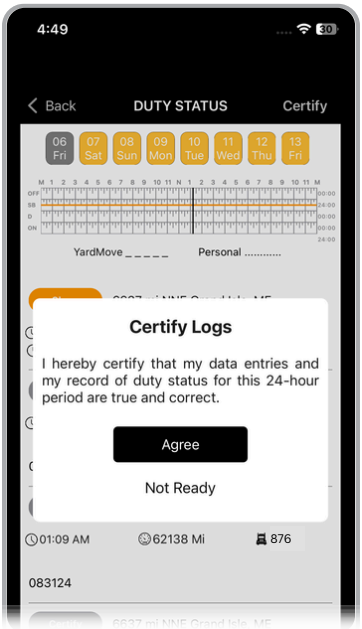
Populate Log Form Data

1.Press the **logs** button at the bottom.

2.Current day logs will show there.



3. Select the date to view previous logs.
4. Press **certify** button on top right corner.
5. Verify your info & press click **agree** to certify.



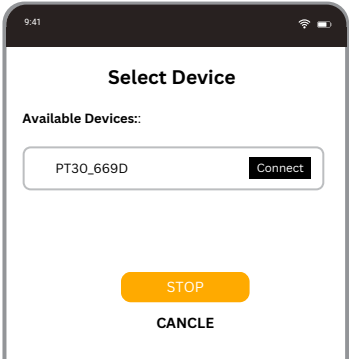
Installation & Connection

Connect your mobile device to the RadicalELD device

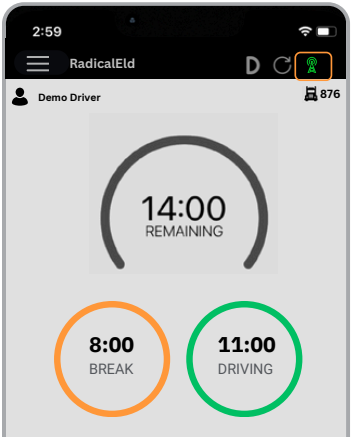
Enable Bluetooth Please ensure that Bluetooth is enabled on your device before you connect to the ELD device.

In the main Dashboard view there is **Tap to Connect** bar.

1.Use the "Tap to Connect" bar to connect to your vehicle. The device will attempt to pair with the selected vehicle's ELD via Bluetooth.



2.An icon will appear in connection bar upon successful connection.



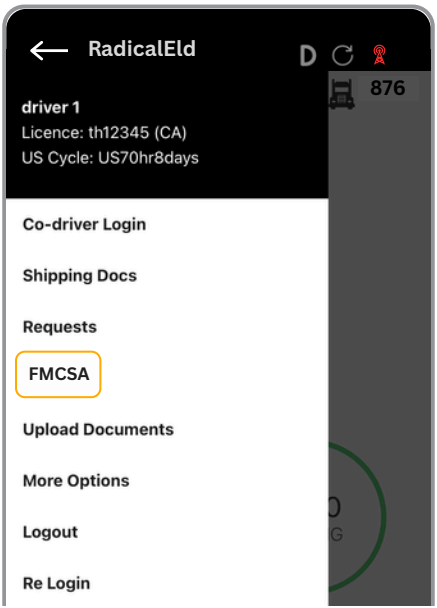
****Ready to Drive****
Once you've completed all the pre-trip tasks in this section, you're ready to drive. When your vehicle reaches a speed of 5 MPH or more, your duty status will automatically switch to "Driving," in compliance with the ELD mandate.

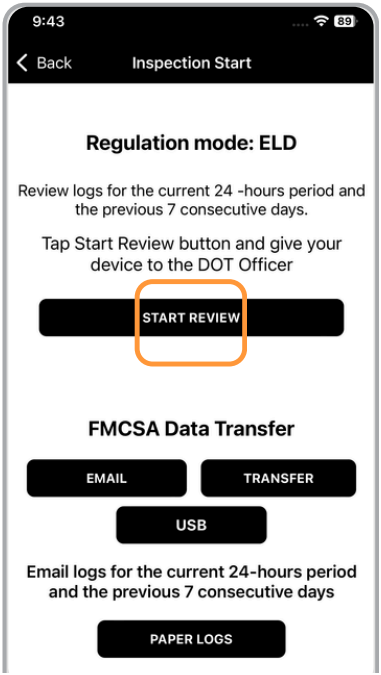
Roadside Inspection

Inspect Logs

To begin the FMCSA inspection tap the menu icon on the top left and select the FMCSA **Inspection**

1. Open the left side menu.
2. Press **FMCSA**.





3.Press **Start Review**.

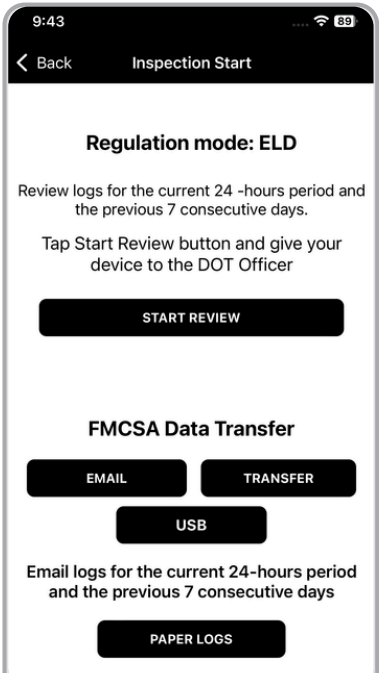
4.Handover the device to the Inspector.

Roadside Inspection

Data Transfer

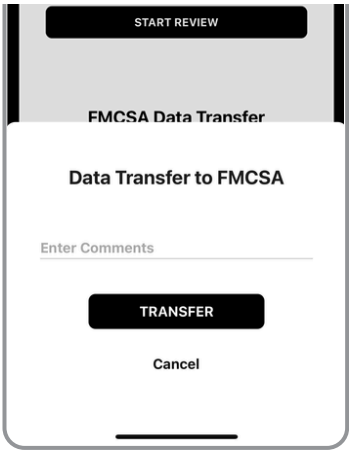
1. Open the left side menu.

2. Press **roadside inspection**.



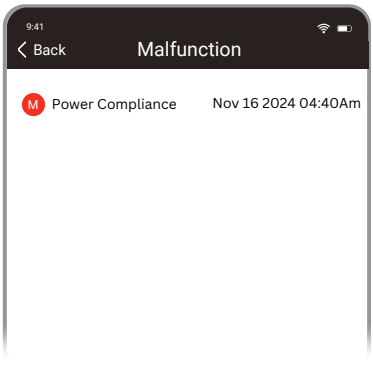
3.Press **Email or Data Transfer**.

4.Enter the comment and press **transfer**.



ELD Malfunctions

Diagnostic and malfunction events are displayed in the application header (top right) as a capital "**D**" and "M." The "**D**" represents diagnostic events, while the "**M**" indicates malfunction events. Tap "**D**" for diagnostic data or "**M**" for malfunction details to view the error information.



Malfunction

Power Compliance Malfunction:

- If The power data diagnostic event indicates an aggregated(sum) in-motion driving time understatement of 30 minutes or more on the ELD over a 24-hour period then Power compliance Malfunction will be created. OR
- If the diagnostics remain for 30 min/more without being clear then malfunction will be created.

Clear Malfunction:

Malfunction cannot be cleared**.**

Timing compliance Malfunction:
An ELD must record a malfunction if the time difference is more than 10 mins from the UTC.(or from the actual time zone

Clear malfunction:

- It will not be marked as clear when we correct the time(it will remain shown on the FMCSA report or on the portal at the time/date it is created) but the malfunction indicator will no longer be shown on the top of the application.

Engine synchronization compliance Malfunction
occurs when ECM connectivity to any of the required data sources (engine power status, vehicle motion status, miles driven, and engine hours , Date and Time, CMV Position, CMV VIN) is lost for more than 30 minutes during a 24-hour period aggregated across all driver profiles.

Clear malfunction:
When Eld will get the missing data, the malfunction will be cleared.

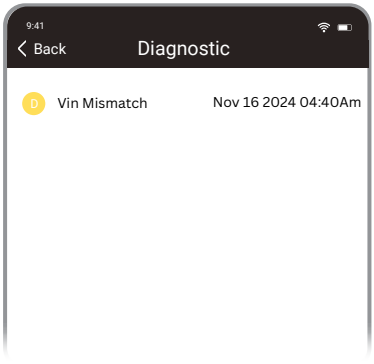
Data recording compliance Malfunction:
A “data recording compliance malfunction” occurs when an ELD can no longer record or retain required events or retrieve recorded logs that are not kept remotely by the motor carrier.

Position Compliance Malfunction:
when ELD fails to acquire a valid position measurement within 5 miles of the CMV's movement. When such elapsed time exceeds a cumulative 60 minutes over a 24 hour period, the ELD must set and record a positioning compliance malfunction.
If a new ELD event must be recorded at an instance when the ELD had failed to acquire a valid position measurement within the most recent elapsed 5 miles of driving, but the ELD has not yet set a positioning compliance malfunction, the ELD must record the character:
X : Indicating position could ot be acquired
When Driver Enter the location manually the ELD must record the character:
M : Indicating the position was manually entered by driver
If a new ELD event must be recorded at an instance when the ELD has set a positioning compliance malfunction, the ELD must record the character:
E : Indicating ELD has an active position compliance malfunction
When ELD pick/update all the required data like latitude,longitude and location the ELD must record the character:
A : When ELD can pick a position automatically

Clear Malfunction:
Malfunction cannot be cleared but if Eld get the acquired location data than character E will change to A
There is no other position malfunction that will occur within 24 hours of it being created.

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

Data Diagnostic



Unidentified driving records data Diagnostic:
If the driver drives an unidentified drive for 30 min or more then ELD detects and records Unidentified driving data diagnostic event. And diagnostic indicator must be turned on for all drivers logged in to that ELD for the current 24-hour period and the following 7 days. There is no other unidentified diagnostic that will occur within 24 hours of it being created.(if not cleared)

How to clear:
When unidentified driving time drops to 15 min or less for the current 24- hour period and the previous 7 consecutive days, the diagnostic will be cleared.

Vin Mismatch Diagnostic:
If the VIN number of ELD and vehicle is mismatched then a diagnostic will be created.
It can be cleared when VIN is matched

Data transfer Diagnostic:
If the data transfer monitoring mechanism fails to confirm proper in-service operation of the data transfer mechanism(s), an ELD must record a data transfer data diagnostic event and enter an unconfirmed data transfer mode.

Missing required data elements data Diagnostic:
occurs when any required data field is missing at the time of its recording.
It will be created with every event when any required data element is missing.
Missing required data element diagnostic cant be cleared.

Engine synchronization data Diagnostic :
occurs when an ELD loses ECM(Engine Control Module) connectivity to any of the required data sources (engine power status(powerup and power off), vehicle motion status(speed), miles driven(odometer), engine hours , Date and Time, CMV Position, CMV VIN) and can no longer acquire updated values for the required ELD parameters within five seconds of the need.

Clear Diagnostic:
When Eld will get the missing data, the diagnostic will be cleared.

Power Data Diagnostic:
An ELD must be powered and become fully functional within 1 minute of the vehicle's engine receiving power and must remain powered for as long as the vehicle's engine stays powered.If no then diagnostic will be created.
note- if VBUS connection disabled than this event will not create

Clear Diagnostic :
When the device gets connected with the mobile then the diagnostic will be cleared.
Indicator of power diagnostic will not be shown on the top of application.
And It will be marked as clear on the portal or file.

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