

ELECTRONIC LOGGING DEVICE

ELD App Visual Guide

For iOS and Android

Hours-of-service logging with FMCSA certification in progress, built around IOSix hardware, the RIGVELLA mobile app, and fleet visibility tools.

SYSTEM OVERVIEW • INSTALL & LOGIN •
DAILY HOS USE • INSPECTION & ALERTS •
COMPLIANCE • GETTING STARTED



Three Components, One System

iOSix hardware, the RIGVELLA mobile app, and fleet management working together.



iOSix Hardware

Vehicle diagnostic interface device. FCC ID 2AICQ-1020.



RIGVELLA App

iOS models RIGVA1/RIGE1A; Android models RIGVG1/RIGE1G.



Fleet Management

Vehicle visibility, live duty status, and compliance alerts.



Core Workflows

HOS, duty status, logs, inspections, alerts, GPS, diagnostics.

— Hardware, app, and fleet tools pair over Bluetooth to keep HOS records under FMCSA certification review (49 CFR Part 395).

INSTALLATION

ECM Port to Bluetooth Pairing

IOSix ELD plugs into the vehicle's diagnostic port and pairs with the RIGVELLA app over Bluetooth, streaming engine data to phone for HOS logging.

1. Plug In the Device

Locate the diagnostic port and seat the IOSix connector firmly.

2. Install the App

Download RIGVELLA: RIGVA1 for iOS, RIGVG1 for Android.

3. Log In and Pair

Sign in, then select the assigned vehicle to connect.

IOSix ELD hardware — FCC ID 2AICQ-1020



MAIN DASHBOARD

Live Dashboard

The RIGVELLA home screen shows four real-time HOS countdown timers so the driver always knows exactly how much legal time remains — at a glance, no math required.

● Drive Time

11-Hour Rule. Counts down from 11:00 hrs. Green ring turns red when nearing limit.

● Shift Time

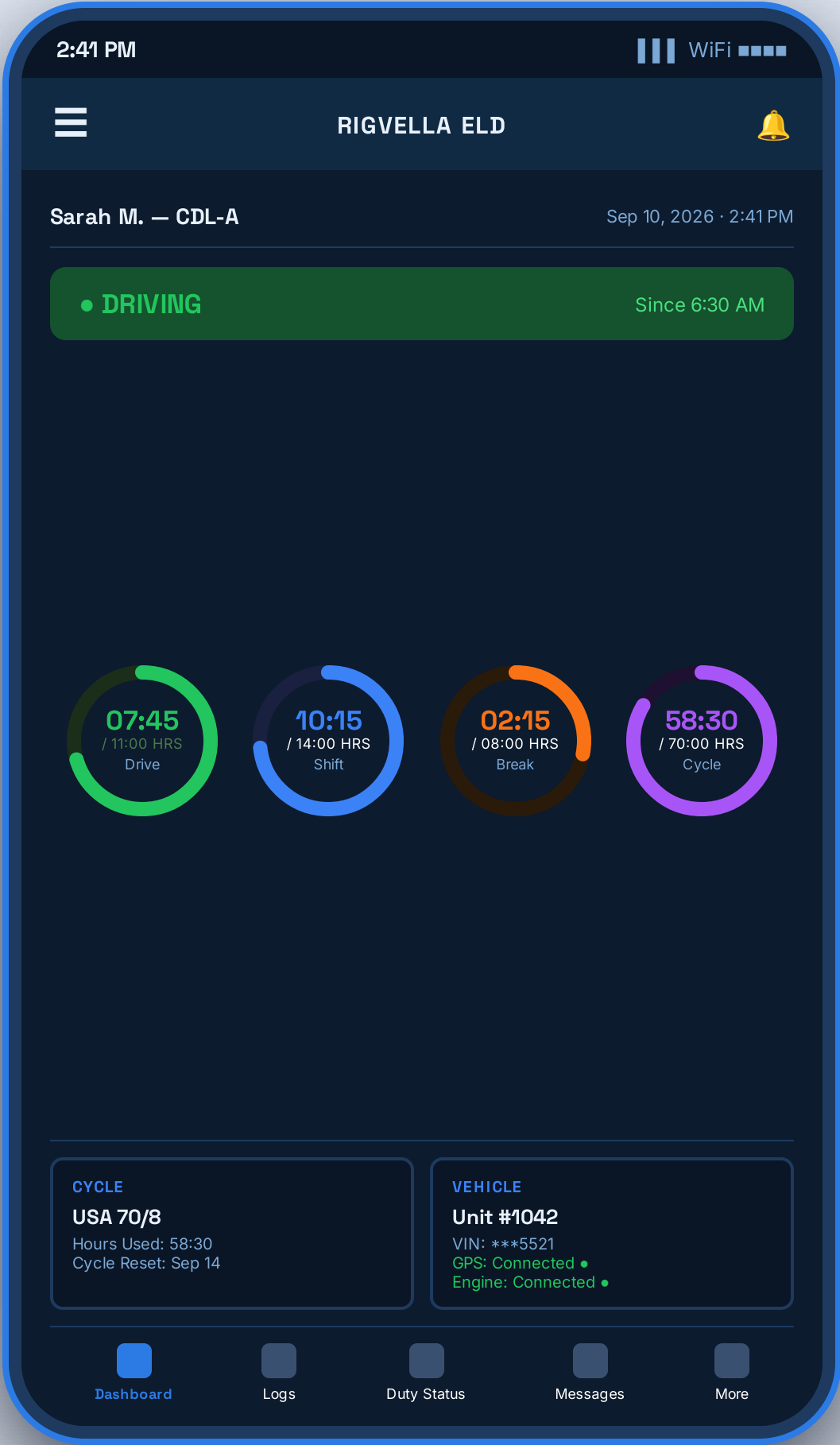
14-Hour Window. Total on-duty window from shift start. Cannot be extended by rest.

● Break Time

30-Min Break Rule. Tracks time since last qualifying rest break. Required after 8 hrs of driving.

● Cycle Time

70-Hour / 8-Day Cycle. Running total of on-duty hours across all days in the current cycle.



Four Statuses, One Tap

Drivers record and update duty state from the app; location is auto-detected

Manual  Off Duty Logged when the driver is released from all work; time counts toward required off-duty rest.	Manual  Sleeper Berth Recorded for qualifying rest taken in the vehicle sleeper, kept separate from off-duty time.
Manual  On Duty Not Driving Covers inspections, fueling, loading and paperwork — working time that is not vehicle motion.	Automatic  Driving Set automatically by the IOSix device once the vehicle moves, so drive time is never under-logged.

— Automatic Driving capture removes the most common source of HOS log error.

HOS Log — Daily Graph

DRIVER: Sarah M.					DATE: September 10, 2026										CARRIER: Rigvella, LLC									
A.M.	P.M.	Mid	2	4	6	8	10	Noon	2	4	6	8	10	Mid										
1. Off Duty																								
2. Sleeper Berth																								
3. Driving																								
4. On Duty Not Driving																								
TOTALS		1. Off Duty: 14.5 hrs				2. Sleeper: 0 hrs				3. Driving: 8.25 hrs				4. On Duty ND: 1.25 hrs				Total: 24 hrs						
Remarks: Normal operations															ELD: RIGE1A — Auto-recorded by RIGVELLA ELD Sarah M. — Sep 10, 2026									

This view mirrors the FMCSA-standard paper log format. The RIGVELLA ELD auto-generates this grid from GPS-verified duty status changes — no manual entry needed.

DOT Inspection — 3 Transfer Methods

FMCSA requires ELDs to support all three approved methods for transferring driver records to an officer. RIGVELLA supports all three — choose the method the officer requests.

1



Email Transfer

Send an encrypted, FMCSA-format RODS file directly to the officer's official email address from the inspection mode screen.

- 1 Officer provides FMCSA-registered email address
- 2 Driver enters address and taps **Send**
- 3 Confirmation screen shows **SUCCESS**

✓ Requires cellular or Wi-Fi

2



Web Service Transfer

App generates a unique 8-character code. Officer enters it at the FMCSA DataQs portal to retrieve records electronically.

- 1 Tap **Web Service Transfer** in inspection mode
- 2 App generates 8-char code (e.g. **RVL-X9K3**) valid 30 min
- 3 Officer enters code at **dataqs.fmcsa.dot.gov**

✓ Requires connectivity

3



On-Screen Display

When no cellular or Wi-Fi connection is available, the driver hands the device to the officer for visual log review in read-only inspection mode.

- 1 No connection available — tap **Show Logs On Screen**
- 2 App enters read-only Visual Inspection Mode
- 3 Hand device to officer for visual log review

✓ Works offline — no internet needed

DOT Data Transfer: Email & Web Service

Methods 1 & 2 of 3 — Select the method the officer requests

2:41 PM

DOT Inspection

READ-ONLY · FMCSA Inspection Mode

DRIVER

Sarah M.

CDL-A · Carrier: Rigvella, LLC

VEHICLE

Unit #1042

ELD ID: RIGE1A (FMCSA Registry)

Records: Sep 3 – Sep 10, 2026 (8 days)

SELECT TRANSFER METHOD

Email Transfer

Send encrypted RODS to officer's email

officer@fmcsa.dot.gov

Enter the DOT officer's FMCSA email

OR

Web Service Transfer

Submit via FMCSA dataqs portal

SEND TO OFFICER ✓

✉ Email Transfer Steps

- ① Officer provides FMCSA email address
- ② Driver enters email & taps SEND TO OFFICER
- ③ **Confirmation: Transfer Successful ✓**

OR

2:41 PM

Web Service Transfer

READ-ONLY · FMCSA Inspection Mode

DRIVER

Sarah M.

CDL-A · Carrier: Rigvella, LLC

VEHICLE

Unit #1042

ELD ID: RIGE1A (FMCSA Registry)

Records: Sep 3 – Sep 10, 2026 (8 days)

Submission Successful

YOUR SUBMISSION CODE

RVL-X9K3

Valid 30 min · Generated 2:41 PM

Copy Code

Share code with officer. Officer enters at:

dataqs.fmcsa.dot.gov

✓ Records transmitted ✓ FMCSA confirmed

✓ DONE — Transfer Complete

🌐 Web Service Transfer Steps

- ① Tap 'Web Service Transfer' on DOT screen
- ② App generates unique code: RVL-XXXX
- ③ **Officer enters code at dataqs.fmcsa.dot.gov**

Warnings Before the Limit Hits

Real-time notifications flag approaching HOS limits and compliance issues.

	Drive Limit Approaching	Red alert fires for Unit 1042, Sarah M., as remaining drive time runs down.	<1 hr WARNING THRESHOLD
	Break Required	Yellow alert prompts the driver to stage a rest break before the clock forces one.	30 min ADVANCE NOTICE
	Log Certification Due	Blue reminder lists the outstanding log day awaiting driver certification.	Sep 7 LOG DAY PENDING
	In-App Notifications	Alerts surface on the phone dashboard while the driver is on the road.	Live ON-DEVICE DELIVERY
	Fleet Manager Alerts	The same compliance events escalate to the fleet team for dispatch action.	Shared DRIVER PLUS BACK OFFICE

Six Malfunction Categories

RIGVELLA surfaces ELD malfunctions in real time so they can be addressed promptly.



Engine Synchronization

Lost ECM link, often a disconnected IOSix cable at the port



Positioning

GPS position cannot be captured for a logged HOS event



Timing

Device clock drifts out of tolerance with UTC reference time



Data Recording

Driver log records cannot be written or stored on the device



Power Compliance

IOSix unit loses power while the vehicle engine is running



Data Transfer

Inspection transfer methods fail their periodic self-check

— Any malfunction prompts the driver to notify the motor carrier and begin paper logs.

Verifying the Signature

Each log event is hashed with SHA-256 as it is written, so edits are detectable and every entry ties back to a named driver.

Hashed at Creation

Each duty-status entry gets a SHA-256 hash the moment it saves.

Edits Leave a Trail

Changes break the hash and log an author-stamped edit record.

Credentialed Access

Driver sign-in gates logs, inspection mode and fleet tools.

Inspectors can confirm a log's hash matches the record at the roadside.



Registered Models

Both platform builds are submitted for FMCSA ELD Registry approval, each with its own ELD output-file identifier.

IOS AND ANDROID

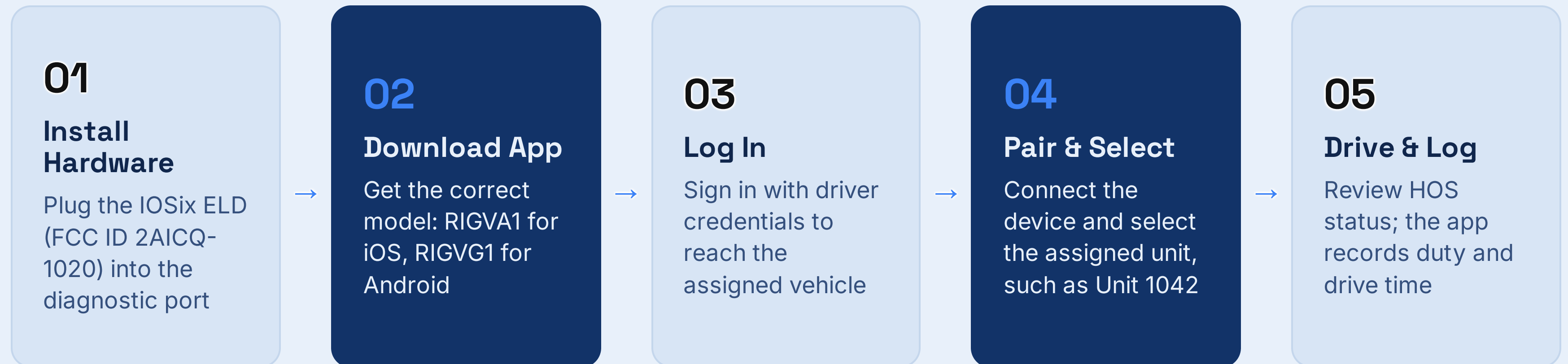
Model PLATFORM	Role IN THE ELD SYSTEM	Regulation COMPLIANCE BASIS	Notes WHAT IT COVERS
RIGVA1 IOS	Driver app	Part 395 49 CFR	RIGVELLA logging app on Apple devices
RIGE1A IOS	ELD identifier	Part 395 49 CFR	Identifier carried in iOS output files
RIGVG1 ANDROID	Driver app	Part 395 49 CFR	RIGVELLA logging app on Android devices
RIGE1G ANDROID	ELD identifier	Part 395 49 CFR	Identifier carried in Android output files



RIGVELLA ELD is submitted for FMCSA ELD Registry approval under 49 CFR Part 395. Hardware identifier: FCC ID 2AICQ-1020.

Five Steps to First Mile

From plugging in the IOSix device to automatic HOS recording on the road



— Setup is a one-time sequence; after pairing, logging runs on its own.

Ready for Every Mile

Built for compliance from install to roadside check

IOSix hardware, mobile logging, and fleet tools in one system — with FMCSA ELD registration in progress.

Install and Pair

Plug the IOSix device (FCC ID 2AICQ-1020) into the vehicle diagnostic interface and pair it with the app over Bluetooth.

Download Your Model

Drivers run RIGVA1/RIGE1A on iOS or RIGVG1/RIGE1G on Android, then log in and select the assigned vehicle.

Log, Inspect, Monitor

HOS tracking, graph-grid logs, three FMCSA-approved transfer methods, alerts, GPS tracking and malfunction diagnostics run from day one.

Talk to Us

Reach the RIGVELLA team to set up your fleet on hours-of-service logging under 49 CFR Part 395, with FMCSA certification in progress.



IOSIX ELD DEVICE
FCC: 2AICQ-1020

hello@rigvella.com • 302-306-3220 • rigvella.com • 10 W State St Suite 200, Geneva, IL 60134