





Shotgun Rider ELD

Operating Manual

Version 1.2 March 10, 2019

"Rugged, Inexpensive and Easy to Use"

"Protecting your information like a shipment of Gold"

"Don't Let the Cloud Rain on your Budget"

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1 Truck Centric ELDs versus Cloud or Phone Centric ELDs.

1.1 What is an ELD?

A Electronic Logging Device (ELD) is required by the Federal Motor Carrier Safety Administration (FMCSA) to monitor the operating Hours of Service (HOS) for Drivers of Commercial vehicles. The ELD is required to have a direct electronic connection to the truck's engine. ELD requirements are very detailed and are found in 49CFR Appendix A to Subpart B of Part 395. The Shotgun Rider device has been designed as a reliable, inexpensive and highly versatile solution for truckers. It has been designed from the ground up to cost effectively meet the rules put forth by the Federal Motor Carrier Safety Administration (FMCSA), while providing the ability to expand features and capabilities as a business grows.

1.2 What is a Truck Centric ELD?

A truck centric ELD stores all of the necessary data and account information in the truck on the ELD. It does not rely on any connection to the internet, and does not risk having a phone or tablet being lost or stolen and losing your ELD data. The following graphic shows the benefits of a truck centric ELD solution.





2.1 Designed to Get your ELD System up and Running in Minutes

From day one, we have designed the Shotgun Rider system to be simple to setup and simple to use. Menus guide the novice user through configuration, and then you are off and driving.

2.2 No Monthly Phone/Internet Service Fee Required

The Shotgun Rider ELD stores all of the account and logging information that you require on the unit itself. There is absolutely no connection to the outside world required. Typically, this can result in a savings of \$20/month for a phone data plan.

2.3 No Monthly ELD Cloud User Fee Required.

The Shotgun Rider ELD was designed to minimize end user cost. Truckers already have a challenging enough business environment without the additional cloud of a monthly fee and a long-term ELD leasing contract.

2.4 No Cost and Clutter of an Additional Display

The Shotgun Rider ELD can share an Android phone or Tablet computer that you already own. Instead of having a ton of displays in your cab, you are able to share one that you already have.

2.5 Automatic Ability to Swap or Upgrade Phone or Tablet Computer

Your phone or tablet computer acts as an interface to your Shotgun Rider ELD. All of your account and logging information is maintained on the ELD itself, so you can use multiple devices to connect to your phone/tablet with no issues. If you lose a phone, or want decide to upgrade to a newer phone, the operation is transparent to you ELD solution.

2.6 No Transportation Management System is Required

If you want to run your business out of your sleeper berth, the Shotgun Rider ELD requires no expensive back office computer system or Transportation Management Software.

2.7 Rugged and Dependable

The packaging, cables, connectors, and overall Shotgun Rider product have been designed for ruggedness. Trucking is a rough business, and your product has been designed for maximum reliability.



3 The Next Generation ELD Shotgun Rider OEM Advantage

3.1 Maximum Ruggedness and Reliability

There are many features that make the Shotgun Rider an extremely Reliable and Rugged Solution. The product has been designed with the OEM customer in mind to permit customization.

- All key power and processing components are Automotive rated.
- Automotive Rated Connectors and Cable Assemblies
- Extremely Rugged Enclosure.
- Supports 12V and 24V Truck Power

3.2 MTN has designed and controls all parts of the Shotgun Rider ELD system

- MTN designs and manufactures the Printed Circuit Board Assembly.
- MTN has designed and can quickly customize the ELD Firmware to provide additional features and capabilities
- The Shotgun Rider ELD Supports Live Firmware updates to allow the OEM to up sell new capabilities.
- The Android Displays can be customized for new features as well as the OEM's look and feel.
- The Rugged Enclosure is Injected Molded in the USA, and part color is OEM selectable.
- The ELD Product Labeling can be OEM specified.
- MTN can develop custom interface cables for unique situations using our world class Cabling providers.
- MTN can customize the Desktop Log Viewer Application for the OEM.

3.3 Shotgun Rider Imports and Exports ".pel" Files (Portable Electronic Log)

- This allows drivers to move between different vehicles and different Carriers while maintaining accurate records.
- This supports quick changeover between ELD Supplier Systems that support the standard.

3.4 Shotgun Rider Supports Local File Transfer Methods(Standard)

- This is the lowest cost approach for small fleets since it requires no internet, cellular or cloud connection, while allowing multiple drivers to move between multiple trucks.
- The Shotgun Rider solution permits OEM products where Support personnel can remotely log into the Shotgun Rider ELD via a cellular connection while it is in use.
- The Shotgun Rider solution permits OEM products where Wireless Web Services and Email File Transfer Methods are permitted using a cellular connection.
- The Shotgun Rider ELD can fully charge your phone/tablet over a standard USB connection while you are operating the device.

4 ELD Solution Pitfalls to Avoid

4.1 Don't Get Locked into a Long-Term Monthly Contract

Nothing will rain on your budget more than a required monthly contract for an ELD solution. If you are required to pay \$49/month, that comes to \$2,940/truck over a 5 year period. Even if the supplier drops their price to \$19/month, that still comes to \$1,140/truck over a 5 year period. This price will be in addition to any up-front ELD cost as well as any additional Tablets, Computers or Transportation Management Software you may be required to purchase.

4.2 Don't be forced to have a Cellular Connection to operate your ELD

Do you really want to have another \$20+/truck Cellular phone charge to operate your ELD?

4.3 Don't lose control of your data and become captive to your ELD Supplier

When you allow your data to be sent through the cloud, you lose control of it. Not only that, the supplier has you locked into their solution unless they provide a simple ".pel" file method to move your data from their cloud computers to another vendors solution for free.

4.4 Don't be required to buy Custom Cab Display Hardware

It is easy to say someone has an inexpensive ELD, and then have them charge you hundreds of dollars for a custom tablet to access the ELD. Not only that, once you buy that hardware, you are locked into its display and positioning capability. The Shotgun Rider approach allows you to have better display and positioning capability every time you upgrade your phone or tablet.

4.5 Don't get locked into an under-powered ELD that won't grow with your needs

As your business grows, and time passes, you may want additional features. Make sure that your system can easily add new capabilities and is powerful enough to do so.

5 The Shotgun Rider Solution

The Shotgun Rider solution has three main components: the Shotgun Rider ELD unit which is approximately 4.25" wide x 3.0" deep x 1.75" high, a vehicle interface cable, and a driver supplied/shared Android Phone or Tablet. The Shotgun Rider ELD unit is meant to be positioned in the vehicle where it can be seen and reached by the driver. It provides six operating and diagnostic LEDs, an audible warning alert, a USB interface connector and a Bluetooth connection.

5.1 Shotgun Rider ELD



5.1.1 Front View

Lights from Left to Right:

Power – Green when Vehicle Power is applied.

Vehicle Interface Active – Green when CAN Bus messages are being received. Driver Login – Green when valid Driver Logged in. Red if driving and no Logged in Driver. USB Memory Stick – Flashing Green when USB or Memory Stick Interface is being used. Wireless – Flashing Green when Bluetooth Interface is being used.

Malfunction – Green when good, and Flashing Red when Malfunction/Diagnostic event.

USB Type A Connector Port:

The USB Type A Connector allows a Memory Stick to be used to locally transfer data to an official. It also permits a tablet/phone to be wire connected to the ELD to allow for simultaneous data transfer and charging of the device.

5.1.2 Rear View



5.2 Vehicle Interface Cable

Based upon the Diagnostic Interface available on your truck, you will need a specific cable assembly to interface your Shotgun Rider ELD to the truck. Shotgun Rider comes standard with the cable of your choice, but if you ever need to switch trucks, alternative interface cables are available so that you can re-use your ELD. In addition to receiving important vehicle information over this connection, the cable also supplies vehicle power to the ELD.

5.3 Android Phone or Tablet Computer with GPS and Bluetooth

You do not need a cell-phone plan with a Phone or Tablet you use with Shotgun Rider. Shotgun Rider only needs this device to support GPS and Bluetooth interfaces. For instance, it is possible to use a prior generation phone/tablet in a drawer as your interface even though it is not setup with a phone connection.

5.4 Optional Vehicle Mounting

MTN provides simple cable routing devices to neaten up the cable to the ELD so that it doesn't interfere with your work. In addition, we can recommend either cup-holder or dash mount devices to mount the phone or tablet used with Shotgun Rider.

6 Android Screen for ELD Connection

The following is the Launch Screen for a phone/tablet that has not been connected to a Shotgun Rider ELD. There are two connection methods for your Phone or Tablet to talk to the Shotgun Rider ELD: Bluetooth or USB. This screen is used to setup and operate a wireless connection to your Shotgun Rider ELD. If you have a question, press on any of the blue question marks to the left for additional instructions.

6.1 Application Launch Screen



Figure 1 – Launch Screen with no Paired Units.

6.2 Searching for a new ELD.

Whenever you wish to connect to a new ELD with a phone or tablet, the "CONNECT TO NEW ELD" button should be pressed. At that point, the following will appear.



Figure 2 – Serial Number Prompt

6.3 Entering the Serial Number

The Serial Number on your unit is found on the back side of the unit underneath the barcode. It starts with the characters "7E", and is a total of 9 characters long. To enter the number, press on the Red Line, and a keyboard will appear. If you wish to exit, hit "CANCEL".



6.4 Approving Bluetooth Visibility

If you wish to connect to your Shotgun Rider ELD using Bluetooth, you must allow the Phone/Tablet to become visible so that the Shotgun Rider ELD can find your Phone or Tablet. As a increase security measure, the Shotgun Rider ELD never makes itself visible; so as to not allow hackers to attempt to connect to the device over wireless. Since your Phone or Tablet can display a message to you requesting permission, this approach is much safer.



6.5 Bluetooth Search Screen

Once you have approved visibility for your device, the wireless antenna will turn Blue, and the Shotgun Rider ELD Serial Number will appear below the antenna. If the Shotgun Rider ELD is powered on, it should take less than a minute for a pairing request message to show up on your screen.



6.6 Approve Pairing Request

When the Shotgun Rider ELD detects your phone or tablet, it will send a pairing request to your unit. At this point, you must approve the request to create a connection between the units. This connection will be maintained, and should not have to be repeated the next time you launch the program.



6.7 Switch to ELD Main Screen for Unconfigured Unit

If a unit has never been configured, once the pairing request is approved, the screen should automatically flip to the ELD Main Screen.



6.8 Switch to ELD Main Page for Configured unit

If Support and Driver Accounts have been created on the Shotgun Rider ELD, the User Names will appear in the pull-down menus. There will be no option to create an initial account. Driver Accounts will be on the pull-down menu next to the Truck Icon, while Support Accounts will be on the pull-down menu next to the Desk Icon. Once the user selects the proper account from the appropriate menu, the Truck Icon or Desk Icon should be pressed to login to the selected account.



Alternative Malfunction/Diagnostic Indicators



Diagnostic Issues with unit that could include Unidentified Driving Records

Malfunction with unit that requires action by Driver.

7 Driver Login Process

7.1 ELD Main Screen

When your phone/tablet device connects to the Shotgun Rider ELD (Electronic Logging Device), the ELD Main Screen will come up. This screen is used to select the Shotgun Rider ELD Account to log into. If this ELD is unconfigured, then the screen will have a button to "CREATE INITIAL ACCOUNT", and you should proceed to the Account Setup process.



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7.2 Driver Login

After you select a Driver Account on the ELD Main Screen, and then press the Truck Icon, you will transfer to the Driver Login page. Prior to logging into an account, you need the correct account password, any co-driver you are operating with, the Tractor/Trailer configuration and the Shipping Document you are using. When these fields are populated correctly, you can execute the Login.

All passwords are stored in the Shotgun Rider ELD, and are compared against the password you send over in this process. For your privacy, as you enter the password, each character is shown and then blocked out. Don't worry since you can always re-enter the password if you made a mistake.



7.2.2 Driver Login with Co-Driver

When you are operating with a Co-Driver, you must enter the User Name of your Co-Driver at Login. This is necessary to help track and permit cleanup of Driving Records.



7.2.3 Configuration Screen

This screen should be used prior to Login to make sure that the configuration is correct, and should be used when Off Duty Not Driving to update configurations after the Driver is already Logged In. In most cases, your Shotgun Rider ELD will be able to automatically retrieve the VIN number for your Tractor. You can name your tractors and trailers with their license number or familiar names. The Configuration Screen is used to enter or change the shipment load information that is necessary to be recorded by your Shotgun Rider ELD.

Note: Trailer pictures are black/white when they are active, and yellow when they are not present. If one Trailer is used, it must be Trailer 1. If two Trailers are used, then Trailer 1 and Trailer 2 should be present.

Example for Entering a Tractor Name:

Example for Entering a Shipping Document:

8 Driver Home Screen

After successfully logging into the Shotgun Rider ELD, you will be moved to the Driver Home Screen. Initially, your phone/tablet will be fetching events from the Shotgun Rider ELD. This process will take a few seconds based upon the number of events to be processed.

Notes:

- 1) The Tractor and associated VIN number should be automatically shown when attached to a vehicle in the above picture.
- 2) The Configuration Button permits changing the Shipping Document or Trailer Configurations during operation.

8.1 Duty Status

8.1.1 DRIVING Duty Status

When your vehicle is going faster than 5mph, the Shotgun Rider Device is required to switch your Duty Status to Driving. When you Stop Driving, you can manually switch the Duty Status. If you forget to switch the Duty Status, after 5 minutes you will be prompted to see if you wish to continue Driving or switch to On Duty Not Driving.

8.1.2 OFF DUTY Duty Status

To switch to OFF DUTY, your vehicle must not be driving. You can switch to this status from either ON DUTY NOT DRIVING or the SLEEPER BERTH as shown below.

8.1.3 SLEEPER BERTH Duty Status

To switch the Duty Status to SLEEPER BERTH, the vehicle can not be in motion. You can switch to this Duty Status from either ON DUTY NOT DRIVING or OFF DUTY.

8.1.4 ON DUTY NOT DRIVING Duty Status

The ON DUTY NOT DRIVING Duty Status enables moving to the Special Duty Status values of YARD MOVES and PERSONAL USE if they are enabled for the Logged In Driver Account. There are many ways to switch to ON DUTY NOT DRIVING as shown above. The DRIVING status can automatically switch to ON DUTY NOT DRIVING after the vehicle is stopped for 6 minutes.

Refer to the pictures in the SLEEPER BERTH and OFF DUTY section that show how to reach the ON DUTY NOT DRIVING duty status.

8.1.5 PERSONAL USE Duty Status

If a Driver Account has been configured to allow Personal Use, the Driver can switch to PERSONAL USE from the ON DUTY NOT DRIVING Duty Status.

8.1.6 YARD MOVES Duty Status

If the Driver Account has been configured for Yard Moves, the Driver can switch to YARD MOVES from the ON DUTY NOT DRIVING duty status.

8.2 Driver Graph

The Driver Graph is meant to be reviewed when the vehicle is stopped. This is why it is included in the pull-down Menu on the Driver Home page. The Driver Graph is meant to replicate the paper graphs that you may have used in the past for Hours of Service tracking.

version 1.2

8.3 Driver Log

The detailed Driver Log is meant to be reviewed when the vehicle is stopped. It is accessed from the Driver Home Page through the sub-menu (See Driver Graph above for directions). The Driver Log is fully scrollable, and you can also jump to a specific date through the date up and down arrows. The Driver Log is also the means to select and edit a specific log entry.

Time Column – Contains Time of Day and Gray Blocks for Dates

Location Column – Contains nearest city of 5,000 or GPS Location.

Odometer Column - Contains Total Odometer Reading for the Vehicle

Engine Hours Column – Total Engine Hours for the Vehicle

Event Type/Status Column – Events as designated by the FMCSA

Origin Column – Can be Auto, Driver or Assumed

Event Edit

8.3.1 Assuming Unidentified Driver Records

There are cases where a Driver needs to assume an unidentified driver record, the record should be selected in the Log.

						•	
Time	Location	Odometer	Engine Hours	Event Type/ Status	Origin		
11:09	0.00,0.00			On Duty Not Driving	Driver		
11:09		0	0.0	Malf - Engine Sync.	Auto		Select Entry wit
11:08	0.00,0.00	0	0.0	Power Up	Auto	•	Unidentified
11:01	1mi N CA Los Gatos			On Duty Not Driving	Driver		Driver in Log
21-Mar-18							
23:41	0.00,0.00	0	0.0	Power Up	Auto		
23:41		0	0.0	Malf - Engine Sync.	Auto		
23:30		0	0.0	Malf - Engine Sync.	Auto		
23:29	0.00.000	0	0.0	Power Up	Auto		
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Drive	r Log			03221	8	:
Time	Location	Odometer	Engine Hours	Event Type/ Status	Origin	
11:08	0.00,0.00	0	0.0	Power Up	Assumed Unassign Driver	ed
11:01	1mi N CA Los Gatos	3		On Duty Not Driving	Driver	
21-Mar-18						
23:41	0.00,0.00	0	0.0	Power Up	Auto	
23:41		U	0.0	Sync.	Auto	
23:30		0	0.0	Malf - Engine Sync.	Auto	
3:29	0.00,0.00	0	0.0	Power Up	Auto	
:3:13	0.00,0.00	0	0.0	Power Up	Auto	
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8.3.2 Event Edit Position and Comment

Just like editing the Driver as shown above, the user can add comments or position entries to certain events. Events that allow changes will have lines to do so. If the Positioning system is not working, the Driver is permitted to enter a position for the record.



🛞 Driv	er Log		合	03221	8			
ime	Location	Odometer	Engine Hours	Event Type/ Status	Origin		Pressing on the Log	
2:51	0.00,0.00			On Duty Not Driving	Driver	-	the updated event.	
2:51		0	0.0	Malf - Engine Sync.	Auto			
2:50	0.00,0.00	0	0.0	Power Up	Assumed Unassigned Driver			
2:21	1mi N CA Los Gatos			Intermediate Log	Auto			
2:16	1mi N CA Los Gatos			Intermediate Log	Auto			
2:11	1mi N CA Los Gatos			Intermediate Log	Auto			
2:06	1mi N CA Los			Intermediate	Auto			
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rip Mile	s: 0 Trip Ho	ours:0.0						
osition	Lat/Long=(0.00,	0.00)						
vent Co	mment: Stoppe	d to cool bra	koc					
	proppe		IKES					

8.4 Driver Log Header

The Log Header provides detailed information regarding the vehicle, configuration, shipping document, etc... that are used when producing a formal FMCSA output log. See the Driver Graph section for a description as to the features in the Orange Toolbar.

	♀ 🕸 🎽 100% 🗖 2:27 PM
Driver Log Header	🟠 ┥ 032218 🕨 🗄
Date:	032218
Time Zone:	US/Central
Time Zone Offset:	-6.0
Starting Time:	020000
Carrier Name:	Hermitage Trucking Co.
USDOT Number:	00000007
Driver Name:	Jackson, Andrew
Driver ID:	andrewj
Driver's License State:	TN
Driver's License Number:	18291837
Co-Driver:	
Co-Driver ID:	
Current Odometer:	0.0
Current Engine Hours:	0.0
	751500001

	오 🔻 🎽 100% İ 2:28 PM
Driver Log Header	🟠 ┥ 032218 🕨 🗄
Current Odometer:	0.0
Current Engine Hours:	0.0
ELD ID:	7E1500001
ELD Provider:	Messenger Terabit Networks
Truck Tractor ID:	NV754387
Truck Tractor VIN:	26
Shipping Document Number:	Old Hickory 983276
Current Location:	37.2, -122.0
Nearest city:	1mi N CA Los Gatos
Unidentified Driving Records:	0
Exempt Driver Status:	0
ELD Malfunction Indicators:	N/A
Driver's Data Diagnostic Status:	N/A
Date:	032218

8.5 Driver Certification

With Electronic Logging, there is no longer the possibility to sign a paper log. In place of a signature, the Driver must certify and/or re-certify each day's driving records. The following process is used to do this.





8.6 Local Log File Transfer to Agent

The Shotgun Rider device supports the complete Local Transfer capability to an agent using either a USB Memory Stick or a Bluetooth connection. To initiate a transfer process, select the "Export Log File" selection in the Driver Home Screen pulldown menu.





Your Log File is now created, and is ready to transfer to an official. It is available on both your Shotgun Rider unit and your Phone/Tablet. The following sections describe how to use the FMSCA specified local transfer methods; as well as available alternate methods to transfer the file to the official.

8.6.1 USB Memory Stick Local Transfer

Your Shotgun Rider device fully supports the FMCSA requirements for a single USBcompliant interface with a Type A Connector on the front of the unit where you can plug in an Officer's Memory Stick device. When storing to a Memory Stick, your Shotgun Rider device has incorporated a number of features for both your safety and the officer's safety from computer virus problems. These include:

- 1) The Shotgun Rider device is not susceptible to standard computer viruses since it is not running a standard Operating Systems such as Windows, Android, iOS, etc...
- 2) The Shotgun Rider device only reads authentication files from, and only stores log files to the Memory Stick. These files are text files and not executable programs.
- 3) The Official Memory Stick can have a keyboard password entry. This helps protect your confidential information in case the official loses the memory stick. If an Official is using a password protected memory stick, they will need to enter the code and then hand you the unit. You will then have a number of seconds to insert it into the Type A USB Connector on the front of the Shotgun Rider unit.
- 4) You are required to enter your password into the Shotgun Rider unit prior to being able to save a Log File. This protects you from someone trying to access your data when they are not permitted to do so.

1

When you press the picture of the memory stick, it will turn blue, and you will be requested to insert a Memory Stick from the official. Press 'OKAY' when you have inserted the memory stick, and you will be automatically transitioned to the Validation Page.



2

For your safety, the FMCSA requires you to re-enter your password prior to copying your Log File to a Memory Stick.



After the driver password is verified, Shotgun Rider permits an optional verification that it can read a file from the Official's Memory Stick.



The Memory Stick Type will be either a "Standard USB Memory Stick" or an "Advanced IEEE-1667 Memory Stick".

The "Present Memory Stick Directory" and the "Present Files" allow for a search to find the verification text file on the Officer's Memory Stick. The name of the file to search for is listed under "Verification File Name".

If the File is found, press VALIDATE. This will compare the files and save your log file if successful.

If the File is not found, or the Official does not request a file verification, press "STORE UNVALIDATED" to save your Log File to the Official's Memory Stick.



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Create Log File	
File Name:	
Jacks3739010419-MTN16121	1
Log File Creation Progress	
Create Log File	
Enter your password below, then pr	ess 'Agree' to continue.
Self	
	CANCEL AGREE
6	
Official Transfer Status	
Colort Transfer Made	
Select transfer Mode	
q w e r t y	u i o p 💌
asd <u>f</u> gh	n j k l Done
t z x c v b	n m ,! ,? 🕇
Ctrl Sym 🔅 Englist	h(US)



5

After you chose to "VALIDATE" or "STORE UNVALIDATED" and your log file is transferred to the Official, you will return to the "Create Log File" screen where you will see the file transfer progress.

When the "Official Transfer Status" bar is completely orange, return the Memory Stick to the Official. If the status shows "USB Transfer SUCCESS", they should be able to locate your file at the top directory of their Memory Stick.

If the status shows "USB Transfer FAILED", you should try one of the next approaches to successfully transfer your Log File to the Official. ♥ ★ ★ Create Log File File Name: Jacks3739010419-MTN164807 Log File Creation Progress Move Log File to Shotgun Rider Select Transfer Method to Official WOW Official Transfer Status USB Transfer SUCCESS

8.6.2 Bluetooth Local Transfer

The Bluetooth Local Transfer capability requires that the requesting official have a phone/tablet that supports Bluetooth Tethering; and has a connection to the Internet. In this case, the Shotgun Rider system attaches to the official's device through a Bluetooth Personal Area Network, and then uses the official's internet connection to transmit a Log File to the FMCSA Web Service. This approach would be most useful in the case of a roadside stop where there is no alternative infrastructure. An official's cellphone or tablet would already need to support and be configured for Bluetooth tethering for this approach to be simply executed.

Using an official's computer for Local Bluetooth Log File transfers to the FMCSA server would require having them setup as Bluetooth Mobile Hotspots in an operation referred to as Reverse Bluetooth Tethering. This approach is not frequently used since it is difficult to setup from a networking/bridging standpoint; and it is dependent upon the type of computer and operating system used. A more common approach is to generate a WIFI Mobile Hot Spot from a computer that permits simple transfers and security (see the next section for how this would be done from a Windows 10 machine).

8.6.2.1 Bluetooth Local Transfer Using Official Cell-phone









When the Official Selects to Pair with your Phone/Tablet, you will receive a Bluetooth pairing request. Verify that the 6 digit number matches the one displayed on the official's phone and press OK.



When the Official's phone is paired to your device, you will be automatically brought to the Bluetooth Settings page in your device. You should see the official's phone (in this example it is shown as Officer_Phone). Press on that phone to connect and verify that it supports Internet Access.





6

Initially, the status should be "Connecting" under the name of the official's phone. If a successful Bluetooth Tether is achieved, then there should be an indication such as "Connected to access Internet Connection" as shown.



To complete the transfer, you need to return to the Shotgun Rider application. This is done by pressing the multiple window button on your device. Find the Shotgun Rider window (top window in this example), and press it to bring it to the foreground.

•
🔍 🚸 💙 🚯 63% 🖬 4:20 PM
Create Log File
File Name:
Jacks3739030819-MTN181917
Log File Creation Progress
Move Log File to Shotaun Rider
Select Transfer Method to Official
Connection
Status
CONNECTED
Status=Warning Count=7
FMCSA ID=783a28c3-77e7-4e50-a28b-867eaf6a08bd
Official Transfer Status

51

8.6.3 WIFI Mobile Hotspot Local Transfer

In many cases, it may be easier for an official to use WIFI to provide you an internet connection. This can even be done using a temporary Mobile Hotspot. For instance, an officer can use a phone or computer to create a password protected WiFi Mobile Hotspot. The Shotgun Rider user can then connect to the hotspot using the provided password. This will provide Shotgun Rider with the necessary internet connection to upload a Log file to the FMCSA Web Server. The following steps are done to access a WiFi Mobile Hotspot or Access Point.









Failed Connection. Mobile Hot Spot or WiFi Access Point is not setup properly.





Select the button on your Android device that permits you to bring up windows for each running application. In this example, the Shotgun Rider application is shaded in the background since we were just running the WiFi settings.



Press on the Shotgun Rider application and it should move to the foreground as shown in the next screen.



8.6.4 Phone/Tablet to Official Bluetooth (file only) Transfer

The Bluetooth process saves your Log File locally on your device, and allows you to simply transfer it to an Agent on request. The first part of this process involves finding your Phone/Tablet's Bluetooth settings from the menus.

∃⊖ > **∆** ⊚ **D** 🝳 🔰 🎽 100% İ 9:35 PM 🖪 🖂 🌶 🟦 🙆 💿 👂 🕏 🎢 100% 🗋 9:48 PM Apps Settings Q Quick settings Find the Settings and $\overline{}$ 1 D then the Bluetooth Peel Smart Remote My Files * Settings for your ŝ \mathbf{z} Phone/Tablet. C + * Bluetooth Wi-Fi Airplane mode Play Games Ð 1.1 Data usage Sounds and notifications Display Play Movies & Play Music TV Play Newsstand Play Store **~**_A 豊 Wallpaper Lock screen Notification POLARIS Office 5 S Health S Voice Samsung panel a Ø () Sprint Fun & Games Finger Scanner Safety Settings Video Power saving assistance 1 Identify and Pair to the Other Device. The

PAIR TO THE OFFICIAL'S COMPUTER USING BLUETOOTH

device in this example is MTN-HP1 which must be set to be discoverable for this operation.



SELECT LOG FILE FOR TRANSFER



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TRANSFER FILE WITH BLUETOOTH





9 Support Account Creation Process

Every ELD must have at least one Support Account. Support Accounts are non-Driver Accounts who handle administration features of the ELD. These capabilities include:

- Add, Modify or Remove Driver Accounts from an ELD
- Add, Modify or Remove Support Accounts from an ELD
- Review Log Entries on an ELD
- Recommend Log Entry changes such as assigned "Unassigned Driver Entries"
- Upgrade the Firmware on an ELD
- Configure the Vehicle Interface for an ELD

9.1 Initial Support Account Creation

If there are no accounts on the ELD, then the following screen selection will allow you to create the Initial Account.



9.2 Create Additional Support Accounts

If there is already at least one Support Account on the ELD, then a new Account can be created by logging into an existing Support Account.





9.3 Completing the Support Account Creation Forms

Prior to setting up a Support Account (or a Driver Account), you will need to have your formal Carrier Name and US-DOT Number handy. Every account on an ELD needs to have a unique username which is often a first name followed by the first letter of the last name. An approach such as this makes it easy to figure out whose account is on the ELD. Passwords must be at least 4 characters, but should be secure enough to protect against unauthorized personnel changing account information or logging in as the wrong driver.



Complete the fields for the two Support Account Creation Forms using the keyboard that appears when you touch a line.





9.4 Modifying or Removing a Support Account

If there is a reason to correct a value in a support account, or to change the password for security, select the account in the Manage Support Accounts screen.



10 Driver Account Creation Process

Every driver that uses an ELD must have a valid account on the ELD. Prior to starting to drive the vehicle, the driver must be logged into the ELD so that it can record the information properly.

10.1 Driver Account Creation

Creating Driver Accounts can only be done by a logged in Support Account at the Support Home screen.







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10.2 Modifying or Removing a Driver Account

If there is a reason to correct a value in a driver account, or to change the password for security, select the account in the Manage Driver Accounts screen.



11 Support Home Screen

The Support Home Screen permits an administrative person to configure accounts, configure vehicle settings, diagnose ELD issues, upgrade ELD Firmware, and specify Carrier Settings. This screen is the home screen for a Support User.



The following menu is shown when the Support User selects the pulldown menu in the upper left of the Support Home Screen.


11.1 Support Log Screen

The Support Log screen has two additional columns beyond the Driver Log Screen. These are the Driver and the Number columns on the far right of the display. A Support User needs to be able to recommend changes to entries, such as ones where the driver is unidentified, and these columns are added to help in this effort.

$\Theta \stackrel{\sim}{\thicksim} \mathbf{A}$	A 🖸 🕲 🖲 🗛	🖾 🛦 🛨	<u>±</u>	₹	♥ ♥ ┘	100%	7:29 AM
Su	pport Log			▲	05/01	/18	•
Time	Location	Odomete	rEngine Hours	Event Type/Status	Origin	Driver	Number
01- May-18							
14:25	0.00,0.00	0	0.0	Power Up	Auto		12958
00:05		0	0.0	Malf - Engine Sync.	Auto		12957
00:04	1mi N CA Los Gatos	s0	0.0	Power Up	Auto		12956
30-Apr-18	3						
23:58		0	0.0	Logout	Auto	andrewj	12955
23:57	0.00,0.00			On Duty Not Driving	Driver	andrewj	12954
23:56		0	0.0	Malf - Engine Sync.	Auto		12953
23:55	0.00,0.00	0	0.0	Power Up	Auto		12952
23:51		0	0.0	Malf - Engine Sync.	Auto		12951
23:50	0.00,0.00	0	0.0	Power Up	Auto		12950
23:49	1mi N CA Los Gatos	s0	0.0	Power Up	Auto		12949

11.2 Support Graph

The Support user can view any unidentified driver records in graph form. If unidentified records are found, the Support User can switch to the Log View to recommend a change to the records. Any change must be approved by a Driver before it will fully take effect. For a given day, if no Unidentified Driver records are present, the line will all be "OFF DUTY" as shown below.



11.3 Vehicle Configuration

When installing an ELD on a pre-2000 vehicle, there may be configurations that must be done manually. This special screen permits the CAN Rate of the bus to be adjusted with a pull-down selection. Possible CAN Rates are 125KBaud, 250KBaud, 500KBaud and 1MBaud. Newer vehicles that meet heavy duty truck standards will operate at a default value of 250KBaud.

On older vehicles, it may be necessary to enter the VIN Number for the vehicle. This is done on the Legacy VIN Entry: field as shown below. Vehicle Speed, Total Hours, Total Odometer, and VIN are typically automatically retrieved from the vehicle. When you connect up to the vehicle, real values in these fields should appear in Blue. The Purple values to the left of the Probe buttons will show how many messages are received while the screen is active. If no activity is received for a given value (such as for VIN), then a PROBE button can be pressed to attempt to retrieve the value.

The Shotgun Rider ELD permits measuring many more values from the vehicle CAN bus. Please see the website for software to measure CUSTOM FEATURES.

	L™ 100%	🗲 11:48 AM			
Vehicle Interfac	е		For pre-2000 vehicles, the CAN		
CAN Rate: 250000 🔻 🖣			Rate may need to be set to another value.		
Legacy VIN Entry: 1HGBH	41.IXMN	109186			
			For Older Vehicles, the VIN		
Required Features for Post 2	000 Vehicle	s:	Number may need to be manually entered here.		
Vehicle Speed: -1.0	0	PROBE			
Total Hours: -1.0	0	PROBE	These fields should show real values when the vehicle is		
Total Odometer: -1.0	0	PROBE	operating in Blue. The number of messages received is shown		
VIN: XYZ	0	PROBE	in Purple.		
See Websit	e for Additio	nal Features:	Additional Features can be		
BACK CUSTOM FEATURES		 configured in this menu as they are purchased/available.			

11.4 Diagnostics

The diagnostic menu can be accessed if you are experiencing a problem and requested to review messages for MTN's Technical Support.



version 1.2

11.5 PEL Download

A ".pel" file contains all of the information from an ELD necessary to use those records on another system. This capability permits the Support Person to Create a PEL File for all of the users of an ELD and covering a range of dates.



11.6 Firmware Upgrade

The Shotgun Rider ELD permits live updates to the firmware (software) in the actual ELD. New versions of firmware will be included in a new version of the Android Application. They can be pulled from the website to update the application on your device.



11.7 Carrier Settings Screens

When a Support Person is setting up multiple driver accounts on multiple vehicles, they may wish to store default settings. The Carrier Settings Screens permit you to store these settings on the Phone/Tablet that you are using.



Carrier Settings are stored on the Phone or Tablet, and not the Shotgun Rider ELD. If you change Phone/Tablet, you will need to re-enter them.



