Rollingtrans

Accurate Elite

User Manual

Introduction

Thank you for purchasing the Rollingtrans - Electric Logging Device (ELD). This advanced, state-of-the-art device is designed to make your life on the road easier, more efficient, and compliant with federal regulations. Engineered with robust features and made with the highest quality materials, this ELD is not just another gadget but a comprehensive solution for all your driving log needs.

As a part of our ongoing commitment to quality and innovation, this ELD model is FCC certified, ensuring that it meets the strictest requirements for both safety and operational efficacy. The device is the result of extensive research and development, incorporating feedback from drivers, fleet managers, and regulatory bodies. Consequently, you have in your possession a device that is easy to use, reliable, and compliant with Federal Motor Carrier Safety Administration (FMCSA) regulations.

In this user manual, you will find detailed instructions on how to properly tune-up, operate, and understand the various features of your new ELD. We have made every effort to provide clear and concise explanations so that you can get the most out of your device. Topics covered include:

- **Tune-up Procedure**: To guide you through the initial setup and calibration.
- **Operation Description**: An overview of the device's operating principles and features.
- **Connector, Button, and LED Instruction**: Detailed information on the device's physical components, including how to interpret the LED indicators.

Please read this manual carefully to familiarize yourself with all aspects of the device before initial use. Keeping this manual handy for future reference is also advised.

Your safety and satisfaction are our utmost priorities. Should you encounter any difficulties or have questions about the device's operation, please refer to the Troubleshooting section or reach out to our dedicated customer support team.

Once again, thank you for choosing Rollingtrans. We are confident that this Electric Logging Device will exceed your expectations and contribute to a safer and more efficient driving experience.

Safety Precautions

Before using your Rollingtrans - Electric Logging Device (ELD), it's crucial to be aware of the following safety precautions to ensure both the longevity of the device and your personal well-being.

Environmental Conditions

Water and Moisture

- **Avoid Liquids**: Keep the device away from water and other liquids, as moisture could penetrate the internal circuitry and cause an electrical short or corrosion.
- **Humidity**: Try to operate the device in a relatively dry environment. High humidity over an extended period can lead to internal condensation, adversely affecting electronic components.

Extreme Temperatures

- **Hot Conditions**: Avoid operating or storing the device in excessively hot environments, such as inside a parked vehicle during summer. High temperatures can reduce the lifespan of electronic components and degrade the battery.
- **Cold Conditions**: Cold temperatures can also adversely affect the device's performance and could lead to screen malfunctions and shortened battery life. Always allow the device to acclimate to room temperature before operation if it has been exposed to cold conditions.
- **Temperature Fluctuations**: Sudden changes in temperature can cause condensation inside the device, potentially damaging electronic components. If the device has been exposed to such conditions, allow it to gradually acclimate to room temperature before operating it.

Direct Sunlight

- **UV Damage**: Prolonged exposure to direct sunlight can cause ultraviolet (UV) damage to the screen and casing.

- **Overheating**: Direct sunlight can raise the device's operating temperature, causing it to overheat. Overheating can lead to degraded performance, increased power consumption, and a potential reduction in the device's lifespan.

Altitude

- **High-Altitude Operation**: If you are operating the device at a significantly high altitude, be aware that the thinner atmosphere could impact the cooling efficiency of the device, potentially leading to overheating.

Dust and Particles

- **Dust Accumulation**: Excessive dust or particles can accumulate inside the device, causing it to overheat or malfunction. Keep the device in a clean environment and, if needed, use compressed air to gently remove any external dust.

By being mindful of these environmental conditions, you can greatly prolong the operational effectiveness and lifespan of your Rollingtrans - Electric Logging Device (ELD). Failure to adhere to these guidelines could result in impaired performance and may void your warranty.

Electrical Safety

Power Source

- **Adapter Compatibility**: Use only the power adapter that is provided with the device. Using an incompatible power adapter can result in electrical shocks, malfunctions, or irreparable damage to the device.

- **Voltage and Current**: Ensure that the power source where the adapter is plugged in meets the voltage and current specifications as stated in the technical section of this manual. Incorrect voltage can cause overheating and permanent damage.

Unplugging

- **Safe Removal**: Always unplug the device from the power source by holding and pulling the plug, never the cord. Yanking the cord could damage the internal wiring, making it unsafe for future use.
- **Outlet Accessibility**: Place the device in a location where the power outlet is easily accessible. In case of malfunction, quick disconnection is crucial for safety.

Cable Management

- **Cable Integrity**: Regularly inspect the condition of cables and connectors. Worn-out or frayed cables should be replaced immediately.
- **Avoid Tripping Hazards**: Make sure that all cables are securely organized and do not pose a tripping hazard. Use cable organizers or ties to keep them in place.

By carefully following these electrical safety guidelines, you minimize the risk of electrical malfunctions, prolong the operational life of your Rollingtrans - Electric Logging Device (ELD), and ensure a safer environment for yourself and those around you. Failure to adhere to these precautions may void the device's warranty and could result in injury or damage.

Device Integrity

Unauthorized Repairs

- **Technician Certification**: Only qualified technicians should perform repairs or maintenance on the device. Unauthorized tampering can void the warranty, compromise device safety, and result in legal consequences.
- **Seal**: Be aware that the device may have a security seal to indicate whether it has been opened. Breaking this seal will void your warranty and may indicate unauthorized access.

Software Integrity

- **Unauthorized Software**: Do not install unauthorized or pirated software onto the device. This can lead to software instability and may introduce security vulnerabilities.

- **Software Updates**: Regularly update the device software through authorized channels to ensure it remains secure and functional.

By rigorously following these guidelines related to device integrity, you can ensure the long-lasting performance and safety of your Rollingtrans - Electric Logging Device (ELD). Ignoring these recommendations can result in voiding the warranty, decrease the operational lifespan, and might expose you to potential safety risks.

Installation and Setup

Vehicle Compatibility

- **Make and Model**: Before installation, verify that the device is fully compatible with the make, model, and year of your vehicle. Some vehicles may require an additional interface or adapter for full compatibility.
- **Electrical System**: Ensure that your vehicle's electrical system can support the power requirements of the device without overloading circuits or draining the battery.

Connection Points

- **Cabling and Connectors**: Ensure that all cables and connectors are securely attached and properly routed to prevent accidental disconnections or tripping hazards.
- **Cable Length**: Verify that all cables are of adequate length to reach their designated connection points without being overly stretched or coiled, which could result in signal loss or interference.

Device Mounting

- **Secure Position**: The device should be securely mounted in a location that minimizes driver distraction while still being easily accessible for interaction if necessary.
- **Mounting Hardware**: Use only the mounting hardware approved or supplied by Rollingtrans - to ensure a secure fit. Unapproved hardware may not be strong enough to hold the device in place, especially under rugged driving conditions.

System Testing

- **Functionality Check**: After installation, perform a complete system check to ensure that all features are working as expected.
- **Signal Strength**: If the device requires a cellular or GPS connection, ensure that it has adequate signal strength in the location where it is mounted.

User Training

- **User Guide**: After installation, go through this user manual to familiarize yourself with the device's features and operational procedures.
- **On-site Training**: Some vendors offer on-site training sessions to educate users about the device's functionalities and best practices for usage.

By following these installation and setup guidelines, you'll help ensure that your Rollingtrans - Electric Logging Device (ELD) functions at its best. Incorrect installation can result in suboptimal performance, increased safety risks, and may void your warranty. Always refer to the detailed installation guide provided for specific step-by-step instructions.

User Safety

Distraction

- **Focused Driving**: While the device aims to aid in logging and monitoring, it is not a substitute for your full attention to the driving task. Always focus on safe driving practices and obey all traffic laws.
- **Pre-set Configuration**: Configure settings and input data when the vehicle is stationary. Adjusting settings while driving distracts from safe operation of the vehicle.
- **Voice Commands**: If the device supports voice commands, utilize this feature to minimize physical interactions with the device while driving.

Emergencies

- **Immediate Action**: In the case of any device malfunction or alert during critical driving activities, pull over to a safe location off the road before attempting to address the issue.

Driver Fatigue

- **Driving Hours**: Be aware of and comply with federal and state regulations regarding maximum driving hours to minimize fatigue and associated risks.

Ergonomic Considerations

- **Accessibility**: The device should be within easy reach, but not obstructing any essential driving controls like the steering wheel, gear shift, or pedals.

Connectivity

- **Data Transmission**: Use caution when transmitting data or connecting to external networks, especially in areas with low connectivity, to avoid loss of crucial information.
- **Manual Override**: Familiarize yourself with manual logging procedures in case of loss of connectivity or device failure, so you can continue to log necessary information.

Screen Brightness and Glare

- **Brightness Level**: Adjust the device screen brightness according to the lighting conditions. Too much brightness in low-light conditions or insufficient brightness in daylight can impair visibility.
- **Anti-glare**: Use any anti-glare features or accessories to reduce screen glare, which can be distracting or impair visibility.

By following these user safety guidelines, you contribute to safer road conditions and a lower risk of incidents related to device use. Always remember that the primary focus should be safe driving, and the device is a tool to assist in that aim. Failure to comply with these safety guidelines could result in fines, penalties, or even severe legal consequences.

Tune-up Procedure

The tune-up procedure is an essential part of ensuring that your Rollingtrans Electric Logging Device (ELD) operates efficiently and in compliance with regulatory standards. This section will walk you through the steps involved in the tune-up procedure, which is designed for both initial setup and periodic maintenance.

- System Optimization:

  The final stage of the tune-up process focuses on system optimization. This includes tasks like clearing the cache and other temporary data to ensure the device runs efficiently. A last diagnostic check will confirm that all components, both hardware and software, are functioning as they should. The device will automatically restart after this stage, signaling the completion of the tune-up procedure.

In conclusion, the tune-up procedure is a multi-step process designed to calibrate, optimize, and ensure the readiness of your Electric Logging Device for everyday operations. Any failures or errors identified during the tune-up should be addressed immediately. This procedure should preferably be executed by qualified personnel and strictly in accordance with the manufacturer's guidelines to maintain the device's compliance and performance standards.

Operation Description (Device Operating Principle)

The Rollingtrans - Electric Logging Device (ELD) is engineered to provide robust, real-time logging and monitoring solutions for commercial vehicles. This section aims to elucidate the underlying principles and mechanisms that govern the operation of this state-of-the-art device.

Data Collection and Logging

- **Sensor Integration**: The device is integrated with multiple sensors that collect data at predefined intervals or in response to specific triggers.
- **Timestamping**: Every data point is timestamped to ensure accurate historical logging and facilitate compliance audits.

- **Redundancy**: Data is stored in a multi-tiered system to safeguard against loss due to system failure, with primary data saved locally and backups in cloud storage.

Data Transmission and Communication

- **Batch Transmission**: The device also supports batch transmission, where data is bundled and transmitted at specified intervals to reduce bandwidth consumption.
- **Two-Way Communication**: The device allows for remote configuration and software updates, enabling seamless adaptability to new regulatory requirements or user needs.

Power Management

- Battery Life: The device incorporates advanced power management features to optimize battery life, allowing for extended periods of operation.
- Fail-Safe Mechanisms: In the event of a power failure, the device automatically switches to a low-power mode to preserve essential functions and data.

RF Function

- RF Module: The device adopts TI CC2340 RF module to connect to the mobile phone.
- RF Frequency: 2402MHz – 2480MHz
- RF Modulation: GFSK
- RF Throughput: 1 Mbps
- RF Crystal: 48 MHz
- RF Antenna: RA00LPFA00MA000, working frequency from 2400 – 2500 MHz
- RF Compatible: BLE5.0 Android9.0+ or iOS12.0+

Compliance and Reporting

- Audit Trails: Detailed logs are maintained for compliance with federal and state regulations, making audits streamlined and straightforward.
- Report Generation: The system allows for the automated generation of reports in multiple formats, which can be sent directly to regulatory bodies if required.

By understanding the operating principles of the Rollingtrans - Electric Logging Device (ELD), users can maximize its capabilities and utilize its advanced features for efficient, compliant, and safe operation. The device is engineered to meet the stringent requirements of today's fast-paced, data-driven transportation industry, making it an indispensable tool for modern fleets.

Connector, Button, and LED Instruction

This section provides an in-depth explanation of the various connectors, buttons, and LED indicators on your Rollingtrans - Electric Logging Device (ELD). Familiarity with these components is crucial for effective operation and troubleshooting.

Connectors

•   Power and Communication Connector: Usually a 10-pin port, this connector is used for charging the device and should be plugged into a stable power source. This connector is also used for vehicle communication.

•   Voltage Requirements: Ensure to use the charger provided above 13V to meet specific voltage requirements and prevent damage.

•   Connection Guidelines: Make sure the connector is tightly secured to prevent signal loss.

Buttons

•   Reset Button: A long press turns the device to Cold Reset, while a short press puts it into sleep or wake mode (Hard Reset).

LED Indicators

A. The red light is the Power indicator light: always on during normal operation

B. The green light is the OBD indicator light: it will flash when the OBBD is communicating.

C. The yellow light is the GPS indicator light: it is always on when the GPS has not been positioned yet, and it will flash after the positioning is successful.

D. The blue light is the BT indicator light: it will stay on when the device can be connected, and it will flash after it is successfully connected to the mobile phone.

Summary

Understanding the role of each connector, button, and LED indicator on your Rollingtrans - Electric Logging Device (ELD) will empower you to operate the device more efficiently and troubleshoot issues more effectively. Always refer to this section for detailed information when setting up, using, or maintaining your device.

Troubleshooting

Troubleshooting issues on your Rollingtrans - Electric Logging Device (ELD) is an essential skill for users and fleet managers alike. This section aims to provide comprehensive guidance on identifying and resolving common issues that you might encounter during the use of the device.

Preliminary Steps

• Software Version: Make sure the device is running the latest version of the firmware and software. Older versions might contain bugs that have already been resolved.

• Reboot the Device: Many issues can be fixed by simply rebooting the device. Before delving into more complex solutions, try a hard or soft reset.

• Check Error Messages: Pay attention to any error messages displayed on the device or logged in the error history.

Power Issues

• Verify that the power cable is connected securely and that the power source is functional.

• Examine the power LED indicator.

Data Logging and Transmission

• Data Not Syncing

• Verify that the ELD is connected to your mobile device (Phone or Tablet).

• Check if the mobile device (Phone or Tablet) catche is full and free up space if necessary.

• Inaccurate Data Logs

Advanced Troubleshooting

If none of the above solutions resolve your issue, advanced troubleshooting might be required, which could involve:

•   Cold Reset: A full factory reset to default settings (Note: this will erase all stored data).

•   Hard Reset: Learn the protocol again.

•   Hardware Inspection: Seek professional assistance for a complete hardware inspection and testing.

Summary

Understanding the common issues and their corresponding troubleshooting steps can greatly simplify the process of resolving problems with your Rollingtrans - Electric Logging Device (ELD). For any issues not covered in this manual, please refer to the online knowledge base or contact our customer support team for expert assistance.

Bluetooth Connection

The ELD Hardware interpreter use Bluetooth wireless connection to your Smartphone or Tablet. From your Smartphone or Tablet, in the "RT ELD Plus" this app, on the right upper corner, click "ELD" to **choose the correct ELD serial number**. Make sure you pair with correct ELD. You can find Bluetooth Device Serial Number on device label.

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

-Reorient or relocate the receiving antenna.

-Increase the separation between the equipment and receiver.

-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

-Consult the dealer or an experienced radio/ TV technician for help.

CAUTION

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

RF Exposure warning

The equipment complies with FCC RF exposure limits set forth for an uncontrolled environment. The equipment must not be co-located or operating in conjunction with any other antenna or transmitter.