

In Vehicle Camera Systems

IVCS ONE

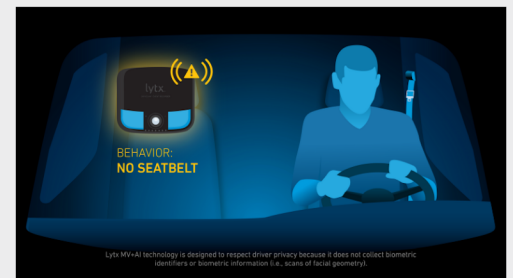
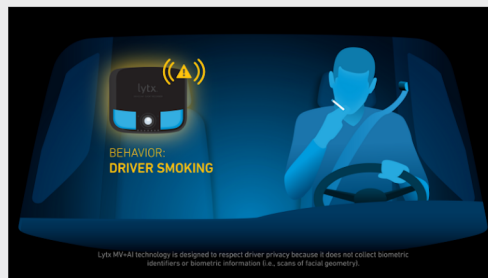
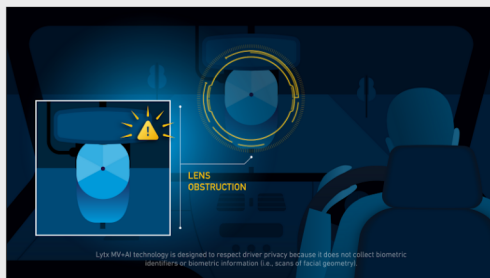
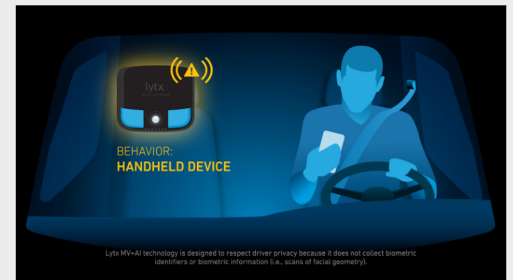
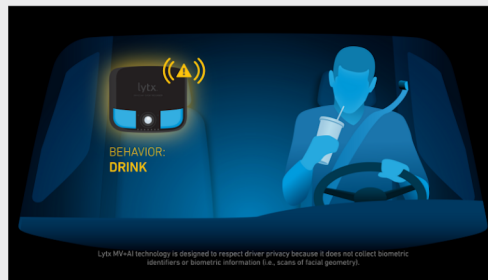
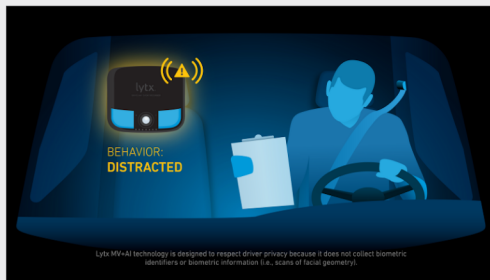
GET THEM SAFELY HOME

DRIVER SAFETY PROGRAMME

The Driver Safety Program is a driver behaviour improvement and risk management process to improve safety and reduce the risk of your fleet. It provides a proven framework to detect, identify, analyse, coach and report on your drivers' road behaviour improvements. This also results in an objective set of metrics and reports for identifying your on-road risk and tracking the improvements which lead to risk reduction. It aligns with transport companies' risk analysis and management processes as part of a Safety Management System (SMS).

IDENTIFYING RISK

The vehicle and driver are monitored for actions or behaviours that are risky. This is done with a combination of vehicle and direct driver monitoring. Vehicle monitoring is done with G-Force triggers (e.g. harsh braking or cornering), ADAS triggers* (e.g. following distance or lane departure). MV+AI (Machine Vision + Artificial Intelligence) Triggers use the cameras built into the DriveCam event recorder to monitor the video for specific behaviours such as those shown below



CREATING CHANGE

As driver behaviour is a people issue, it requires a human touch to effect change. The coaching session (step 5) is critical to the program's success. Using the event video from DriveCam™ the driver can see their actions and reactions to driving situations. This visual learning style effectively allows your drivers to interpret their behaviour for themselves and how they can best improve their performance. In addition to the event-based process, you can browse the external view footage stored on the DriveCam devices in the vehicle. IVCS helps you run a successful program by working with your coaches to implement best practices and understand how to get people to commit to changing their behaviour. Our Client Success Managers are there to guide your team each step of the way. We talk to the drivers, coach your coaches, and provide you with comprehensive, concise data snapshots to keep your program on track. Our senior client experience team will also offer in-depth quarterly performance reviews to help you achieve safety milestones and get the most out of your investment.

Proudly 100%

NZ
owned & operated

In Vehicle Camera Systems

MV & AI

THE MACHINE VISION & ARTIFICIAL INTELLIGENCE
TECHNOLOGY BEHIND LYTX "TRIGGERS"

The innovative DriveCam® helps improve fleet safety by watching for unsafe driving behaviours on the road and in the vehicle. The device's advanced Machine Vision (MV) and Artificial Intelligence (AI) technology analyses driver behaviour and nearby vehicles to determine how a driver performs relative to their surroundings. Specific driver behaviours, such as following too closely, failing to wear a seatbelt, or texting while driving, trigger the DriveCam to flag and "trigger" the event.



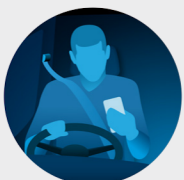
WHAT ARE THE BENEFITS OF MV+AI TECHNOLOGY?

Lytx's MV+AI technology helps fleets by providing an expanded view of risk. The insights from MV+AI can reveal if a driver needs to work on reducing a specific behaviour or if certain risky behaviours appear among all drivers. If this is the case, an organisation-wide initiative to improve safety may need to be implemented.

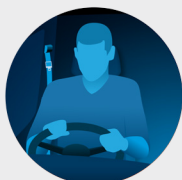
- ✓ Identifies difficult to detect distracted driving behaviours
- ✓ Real-time audio and visual alerts help drivers self-correct
- ✓ Detailed reporting on alerts, events and continuous behaviours

IDENTIFYING RISK

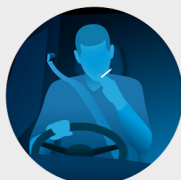
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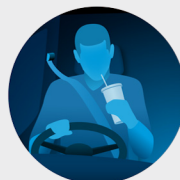
Handheld Device Use



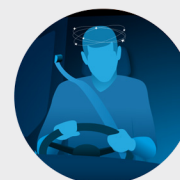
No Seatbelt



Smoking



Eating & Drinking



Attentiveness

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HOW THE MV+AI TECHNOLOGY LEARNS

Lytix's MV+AI technology uses information from several sensors to identify risky situations and driving behaviours. By analysing images and video data, machine vision can see and recognise objects and behaviour. AI interprets and learns from those images and video data to determine the likelihood that a particular event or behaviour occurred. The combination of video and other sensors in and around the vehicle, called video telematics, provides information to help the artificial intelligence learn—similar to how our brains rely on information from each of our senses to understand what is happening around us.

Not just any data can be used to train the AI to identify and categorise risky driving behaviours. The data must come from a large database. It also must be validated. The most accurate validation comes from human reviewers. Here's why: Human experts help surface important nuances that help the system learn faster and interpret complex scenarios. For example, AI technology might detect a lane departure and trigger a video event clip. We know that lane departure is highly correlated with distracted driving, such as texting. However, a human reviewer might notice that this swerve was due to a construction area forcing all traffic to make a sudden lane change. This type of nuanced data is important in helping to refine, learn, and anticipate what might happen next and become more sophisticated along the way. Humans have reviewed Lytx events for over 10 years.

HOW DO MV+AI TRIGGERS WORK?

Machine Vision recognises an object through the DriveCam event recorder's lens, and AI uses that information, along with other data like speed, GPS to determine if that combination of information is risky. You can think of machine vision as the eyes, and AI as the brain.



DRIVER-FACING LENS DETECTS DISTRACTION

Lytix's MV + AI technology is trained to recognise objects and actions that indicate distracted driving behaviour, such as using a mobile phone, eating and drinking, smoking, or failing to wear a seatbelt. The driver-facing camera captures and analyses images that allow the machine vision technology to recognise an object such as a cigarette or a mobile phone. The AI is trained to categorise the mobile phone, cigarette, food, drink, or seat belt use as risky.

Even if the object in question is hidden from view, the AI can detect behaviours such as looking down repeatedly to determine reliably that a driver is texting. Importantly, risky distracted driving behaviours tend to happen together. Almost 1 in 4 drivers engaging in one risky behaviour are doing more than one at the same time. Identifying and coaching risky behaviour is one of the most important steps in improving overall fleet safety. Lytx's fleet management solutions use machine vision and artificial intelligence technology that helps uncover previously undetected risky driving behaviours so fleet managers can coach their drivers to improve.

See how your team can benefit from this revolutionary technology, and get a free demo.

**HELP IMPROVE YOUR FLEET'S SAFETY BY WATCHING
FOR UNSAFE DRIVING BEHAVIOURS ON THE ROAD
AND IN THE VEHICLE. CONTACT US TODAY.**

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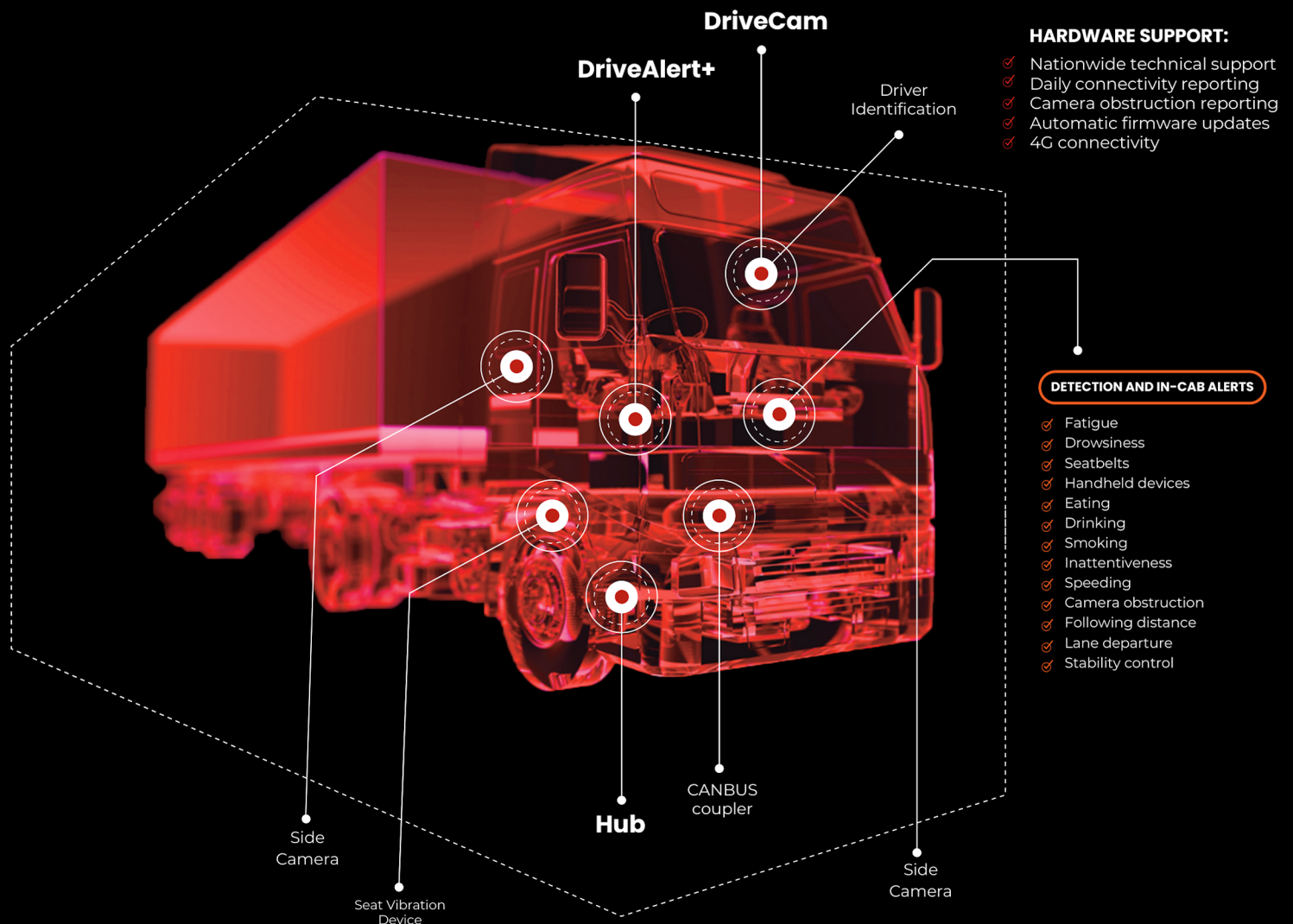
Services

DRIVECAM ONLINE:

- ✓ Driver Safety Program / Safety Management System
- ✓ BI Dashboard / data capture and reporting
- ✓ Driver performance and driver behaviour insights
- ✓ Focused coaching process
- ✓ Repeat behaviour indicators
- ✓ Coaching effectiveness insights
- ✓ Closed loop driver coaching framework

NATIONWIDE SUPPORT:

- ✓ Dedicated Account Manager
- ✓ COR compliance / coaching reports
- ✓ New driver induction
- ✓ DriveCam system training
- ✓ Coaching support and workshops
- ✓ System operational support / safety Improvement
- ✓ Goal setting / KPI management
- ✓ Ongoing Fleet Safety Management Reporting



In Vehicle Camera Systems

DRIVEALERT+

Driver fatigue and distraction monitoring

- DriveCam compatible / integration
- In-cab audio alerts
- 24/7 back-to-base monitoring
- Pairs with seat vibration device
- Compatible with most sunglasses



DRIVETRAIN

Video telematics for individuals and light fleets

- identifies dangerous driving behaviours
- Uses AI and ML for real-time driver alerts
- Reduced collision risks for all drivers
- Cloud-based tracking and event viewing
- Integrated online and mobile app

DRIVECAM SF SERIES

Driver management system

- Integrated (MV + AI)
- Real-time alerts and driver feedback
- ECM connectivity capable
- Wide-angle lens - interior and exterior
- Continual forward facing video storage



GEOTAB

Expansive telematics with a network of sensors

- Sensors detect driving & record HD footage
- Day or night recording with infrared LEDs
- Cloud-based data storage
- Access to video and image data anytime
- MyGeotab pairs footage with GPS data

LYTX HUB

Vision around the vehicle

- DriveCam compatible / integration
- Up to 4 additional cameras
- 360 degree external view - no blind spots
- 100 hours video storage per camera
- Retrieve video anywhere, anytime



RUC MONKEY

Online road user charge management (ruc)

- Advanced technology for real-time charges
- Quick and easy installation
- Nationwide tested for superior reliability
- Accurate road user charge management
- Proudly New Zealand-made

BENEFITS FOR FLEET OPERATORS

24/7 asset protection
Third party false claim protection
Ghost damage protection
COR compliance / safety management system
Cloud based / encrypted storage

BENEFITS FOR DRIVERS

Onboard witness / third party false claims
Hazard identification / reference Self correction opportunity
Safe driving recognition
Return home safely

DriveCam

THE WORLD'S LEADING DRIVER BEHAVIOR MANAGEMENT SYSTEM

Proven to protect over 450,000 drivers in more than 500 fleets, DriveCam Powered by Lytx delivers results. Major fleet operators turn to DriveCam year after year because they realise millions in savings and indirect benefits when they:



ACCESS UP TO 200 HOURS OF CONTINUALLY RECORDED VIDEO

Our DriveCam Event Recorder provides reliable, continual recording, giving you up to 200 hours of video evidence anywhere you have internet connection.



MULTIPLE VIEWS TO CAPTURE ALL ANGLES

Choose between road facing view, inside view, or both, or implement additional views with up to four additional connected cameras placed around the vehicle.



EASILY FIND WHAT YOU'RE LOOKING FOR

Zero in on the exact piece of video recording you need so you can get back to work faster. Search by time and date, location or event.



CUSTOMISE YOUR VIDEO CLIPS WITH EASE

Select and save up to 20 minutes of video at a time in your library or download clips and save them for as long as you need.



INTEGRATED MICROPHONE

Records inside and outside sound when triggered

PROVEN TECHNOLOGY THAT OFFERS TANGIBLE RESULTS



AUTOMATIC EVENT UPLOADS

Events upload daily to Lytx for professional review



NIGHT ILLUMINATION

8 high-lumen infrared lights for clear video in low light



WIDE-ANGLE DUAL LENS

Driver and road facing views give you the big picture of risk



MV + AI

On-board machine vision and artificial intelligence proactively detects driving risk at the edge



MANUAL RECORD BUTTONS

Lets drivers capture events on demand, as needed



AUTOMATIC EVENT UPLOADS

Over-the-air system and firmware updates



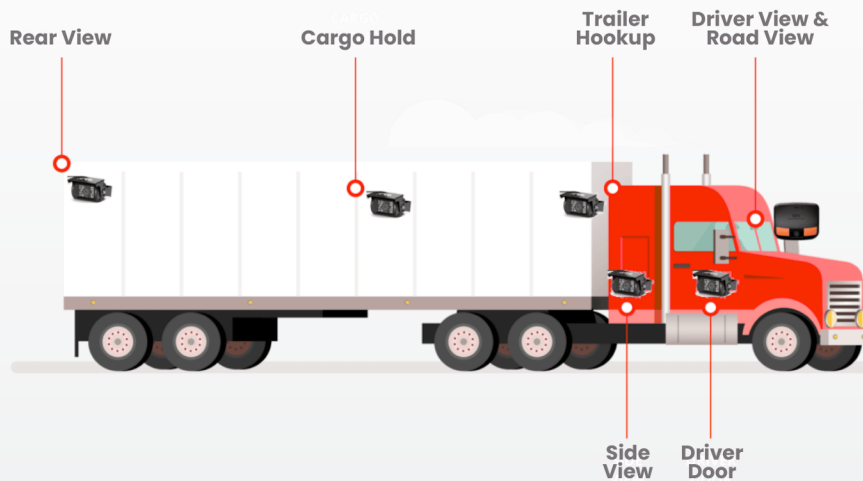
CONFIGURABLE AUDIO

Customised audio settings including in cab alert from MVAI triggers and audio on/off for events

Lytx HUB

CAPTURE THE STORY FROM ALL ANGLES WITH LYTX HUB™

To manage all aspects of safety and security, you need to see from every angle. Adding side and rear cameras and connecting them with the Lytx Hub™ Adapter means you'll be able to better verify workers' compensation claims, understand mystery damage, help your drivers avoid injury, and reconstruct all types of collision claims, including rear-end and sideswipe incidents.



INTEGRATE WITH LYTX HUB™

API TO LINK ALL YOUR CAMERAS

VIDEO ON DEMAND

Access 200 hours of extended video on demand from each connected camera

REMOTE WAKE UP

Access your recorded video even when your vehicle is in hibernation mode

CLOUD CONNECTED

Secure connection to the Lytx cloud so that you can retrieve your video over the air when you need it

STREAMLINED INSTALLATION

Small form factor provides installers with multiple discrete placement options to suit vehicle types

THIRD PARTY CAMERAS

Open interface so that you can connect with compatible third party NTSC or PAL cameras

COACHABLE EVENTS

Unlimited 30 second exception based video event extension

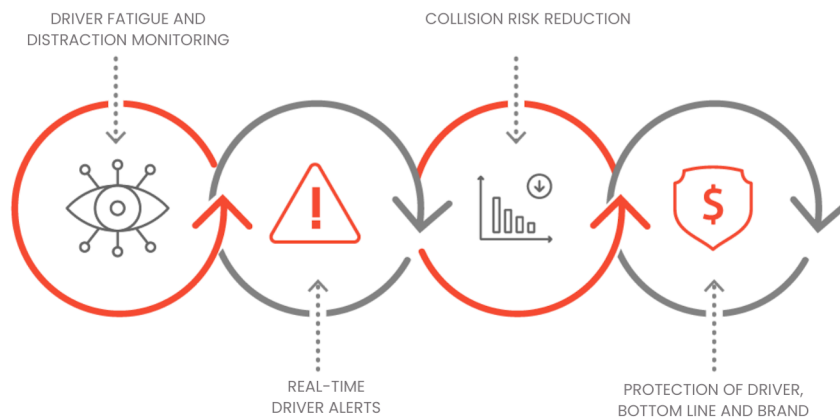


Detect Driver Fatigue

DriveAlert +

FATIGUE AND DISTRACTED DRIVING MONITORING SOLUTION

With an audible alarm that increases in volume and frequency to force a driver to take note of their dangerous fatigue level and stop the vehicle before a possible collision or to redirect their attention from any distraction. Introducing DriveAlert+



THE EARLY WARNING SYSTEM YOU NEED



AUDIO ALERT SYSTEM

When detecting these signs an audio alarm will sound to alert the driver of their fatigued state. If they continue to drive & show signs of fatigue the system will continue to alarm in a high-pitched tone followed by voice alerts.



SMART SYSTEM

The unit looks like a camera, however, incorporates a high-end infrared camera, microprocessor, memory modules & alarm system. Fatigue and distracted driving monitoring 24/7 in all weather, and light, conditions, including if the driver is wearing sunglasses.



MONITORING EYES AND FACE

DriveAlert+ recognises fatigue and distracted driving by monitoring a driver's retinas and face. By incorporating the PERCLOS system (Percentage of Eye Closure), fatigue is detected even before the driver closes his eyes. A high-pitched alarm followed by voice alerts is used to make the driver take note of fatigue levels or distractions.



AUTOMATIC DRIVER SCANNING

On each vehicle start-up, the DriveAlert+ monitor will scan the driver's eyes and facial features to recognise any future changes related to fatigue or distraction.

OUR SOLUTIONS

Lytx

IVCS ONE
IN VEHICLE CAMERA SYSTEMS

DriveTrain

THE POWER OF ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

Machine vision (MV) and artificial intelligence (AI) help drivers and fleet managers correct distracted driving and risky driving as it occurs. Data is collected when your dashcam is online and is analyzed to detect distracted driving events. The driver receives visual and audio alerts when an event is identified. If the driver continues their behaviour, the event is uploaded to the cloud.



Collision Detection



Cellphone Detection



Distracted Driving



Driver Smoking



Driver Unbelted



INTEGRATED MICROPHONE

Records inside and outside sound when triggered

VIDEO TELEMATICS DASHCAM

ADVANCED TECHNOLOGY



AUTOMATIC EVENT UPLOADS

Events upload to the cloud



NIGHT ILLUMINATION

6 high-lumen infrared lights for clear video in low light



MANUAL RECORD BUTTONS

Lets drivers capture events on demand, as needed



WIDE-ANGLE DUAL LENS

Driver and road views give you the big picture of risk



AUTOMATIC DEVICE UPDATES

Over-the-air system and firmware updates



MV + AI

On-board machine vision and artificial intelligence proactively detects driving risk in real time



REAL-TIME FEEDBACK

Display shows detected behaviour and signals the driver through audible alerts to prevent collisions

DriveTrain

Video Telematics

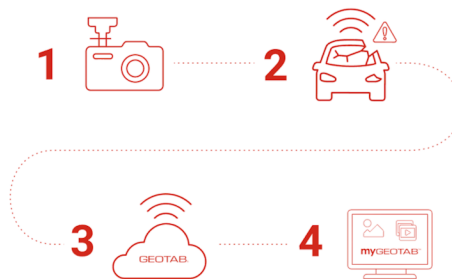
GeoTab

THE EVOLUTION OF FLEET TRACKING

The next generation fleet tracking device from Geotab is built to support your fleet now and as it grows. Connect to the platform that helps you reduce fleet costs, increase productivity and efficiency, improve safety, and strengthen compliance.

FLEET MANAGEMENT SIMPLIFIED

Geotab's fleet management software, MyGeotab, takes the complexity out of collecting data and transforms it into useful information that businesses can act on. For example, most Geotab customers want to understand how fuel consumption is impacted by driving habits, time of day spent driving, and the vehicle make and model. Geotab normalizes the data to a common unit of measurement to simplify fuel management.



A FLEET BUILT FOR THE FUTURE

Welcome to the most powerful GO device ever. The Geotab GO9 is redesigned from the ground up, featuring a 32-bit processor, more memory, more RAM and a gyroscope. The GO9 features expanded capacity for further native vehicle support, improved fuel usage support, electric vehicles and global expansion.

DATA THAT IS SECOND
TO NONEACCURATE VEHICLE
TRACKING

Collect rich, accurate data on vehicle movements and activity – linked to DriveCam

VEHICLE HEALTH
ASSESSMENTS

Extract valuable information on vehicle health and status. Record VIN, odometer, engine faults and more.

COLLISION DETECTION &
NOTIFICATION

Geotab offers exceptional harsh-event data (acceleration, braking, cornering, etc.)

SECURED
DATA

Geotab uses authentication, encryption, and message integrity verification

IN VEHICLE
COACHING

Improve driving behaviours, like speeding and idling, by playing an audible alert

ADVANCED DATA
CAPTURE

Vehicles send data from a multitude of sources, including the engine, drivetrain, instrument cluster and other subsystems.

GEOTAB

Electronic Road Usage Charge Management

RUC MONKEY

WHAT IS RUC MONKEY?

RUC Monkey is an electronic RUC system that manages your road user charges on the fly. Its secret lies in the new-generation wireless technology. This lets us install it faster and get your vehicle back on the road in minimum time. RUC Monkey has gone through vigorous testing all around the country to ensure superior reliability & accuracy.

Transforming the electronic management of Road user charges, RUC Monkey is an affordable and accurate answer to road user charges management. Built and operated by New Zealand-based company Picobyte Solutions Ltd, RUC Monkey is a proud New Zealand invention and continues to be manufactured locally.

FEATURES



FLEXIBLE PRICING

You have the option to buy hardware outright and simply pay a monthly eRUC management fee, or choose a managed service model to minimise upfront expense.



1 HOUR INSTALL

Installation takes 1 hour thanks to RUC Monkeys next-generation wireless technology. So your vehicles can get back to completing jobs and earning revenue faster.



REAL TIME TRACKING

Gain peace of mind with RUC Monkeys tried and tested hardware and GPS positioning data.



OFFROAD REFUNDS

If you're a Fleet customer, you may opt for Direct Debit. If you're an Owner/Driver or small fleet you may use the secure POLi payment methods.



AUTO-RENEWAL

Never run out of RUC units with eRUC's auto-renewal function. When your RUC credit gets low, our system can automatically top it up - so you're always compliant.



INTEGRATED FLEET MANAGEMENT

Add-on modules like GeoTab provides the web and mobile-based software you need to manage your fleet remotely.



Electronic Road Usage Charge Management

RUC MONKEY



LDV / EV

LDV's and EV's such as pick-ups, utes, and service vehicles can be fitted with the RUC Monkey system for comprehensive GPS tracking and managing the electronic purchase and display of RUC licences.



HOW IT WORKS

Vehicle and RUC information is transferred from the in-vehicle installed system via secure wireless link to the RUC Monkey server, which interfaces with the NZTA RUC system, payment facilities and map data provider. Using a secure internet connection, the operator can view the vehicle and RUC licence, and make real time RUC purchasing decisions and even choose to let the system on auto-renew mode so it ensures that RUC licences are purchased at the right time to be compliant always.

BENEFITS



GET BACK ON THE ROAD FASTER

Quick Installation with RUC Monkey's Next-Gen Wireless Sensor. Keep your vehicles on the road - our setup takes only ONE hour!



AFFORDABLE FLEET SCALING

Whether you're a small operator or a large organisation managing a whole fleet, RUC Monkey allows you to affordably scale to your business.



LOCAL NZ COMPANY JUST LIKE YOURS

RUC Monkey has New Zealand DNA. From its founding, to its hardware manufacturing and software development. We deliver a quality product with friendly local service.



Electronic Road Usage Charge Management

RUC MONKEY



TRUCK

RUC Monkey for truck and trailer can be fitted to provide complete functionality independent of the truck/tractor. Similar to other versions, a wireless wheel sensor is attached to the vehicle to measure RUC, but now with an additional trailer unit to report on both the prime-mover and carrying unit.

The unit can be quickly installed to get your truck back on the road in minimum time. RUC Monkey has gone through vigorous testing all around the country to ensure superior reliability & accuracy.



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RUC monkey

Electronic Road Usage Charge Management

RUC MONKEY

BUS



Buses can be fitted with the RUC Monkey system for comprehensive GPS tracking and managing the electronic purchase and display of RUC licences. A Bus is fitted with the same wheel sensor used by trucks, designed for larger rigs to offer accurate odometer values.

These metrics are then shown on the in-cab Display unit to monitor by the driver. The Installation, similar to heavy vehicles is extremely simple and quick, to ensure your bus spends as little time off the road as possible.



HOW IT WORKS

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IN VEHICLE CAMERA SYSTEMS

MY RUC



LDV / EV

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