Mobile Radar Signs

Real-time driver speed feedback

PORTABLE **REAL-TIME** **SAFER SPEED**

Key Features

- Real-time vehicle speed display & driver feedback
- Supports proactive speed reduction
- Portable, tripod-mounted design for easy deployment
- Detects speeds from 11–120 km/h at distances of 16–180m
- Single-person setup and relocation
- Onboard data capture for up to 10,000 vehicle records
- Battery-powered operation (13-20 hours typical use)

Introduction

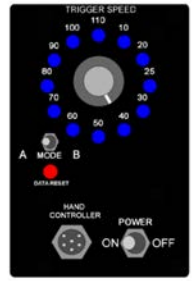
The RTL Mobile Radar Sign displays the speed of approaching vehicles in real time, prompting drivers to reduce speed and improve site safety across temporary traffic management (TTM) sites and infrastructure projects. The unit features a bright LED display, internal radar detection, battery powered operation, and a tripod mounted design, delivering accurate real time speed feedback in a portable format suitable for a wide range of applications.

- Temporary traffic management (TTM) sites
- Roadworks, maintenance, and resealing
- State highways and local roads
- Civil construction and earthworks
- Infrastructure and major projects
- Internal site traffic and haul routes
- Facilities and distribution centres
- Equipment hire and short-term sites

Our highly portable Mobile Radar Sign delivers real-time speed feedback to help reduce speeding and improve road safety

How it Works

The trigger speed is set via the onboard control panel to match the site speed limit. As vehicles approach, the LED sign shows a green smiley face for drivers under the speed limit, or a red sad face with flashing slow-down messaging if the vehicle is over the speed limit, prompting drivers to reduce speed.



Dual Digital Display Options

Under the Speed Limit
Positively encourages safe driving

Over the Speed Limit
Clear warning prompts drivers to slow

Mode A - Roundel Speed Limit

Displays Smiley Face & Trigger Speed (Set Speed Limit)

Displays Sad Face & Trigger Speed (Set Speed Limit) *+ Three Flashes*

Mode B - Detected Speed

Displays Smiley Face & Detected Speed (Vehicle Speed)

Displays Sad Face & Detected Speed (Vehicle Speed) *+ Three Flashes*

Why It Works On-Site

Portable speed feedback devices influence driver behaviour by providing immediate visual cues based on detected speed. Speeding, whether intentional or not, continues to put roadworkers and road users at risk. Under New Zealand's risk-based approach to temporary traffic management, these devices provide a practical way to manage vehicle speed on site.

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Onsite Setup & Programming

The Mobile Radar Sign is designed for simple field setup and can be deployed by a single operator. Before use, ensure the unit is fully charged. Basic setup involves positioning the tripod, securing the radar head, and adjusting height using the locking pin system. Always stabilise using sandbags.

The unit is configured via the onboard control panel, which is used to set trigger speed, operating mode (Mode A or Mode B), power, and access the data and hand controller port. The system then operates automatically, detecting approaching vehicles and providing real time speed feedback with no further input required. The trigger speed can be changed using the dial.

Vehicle data is recorded during operation and downloaded via the Windows application for reporting and analysis. For full operating instructions, refer to the user guide.

Set up & Deployment

Position unit on stable, level ground with clear visibility.

- Extend and lock tripod legs into place
- Adjust height and secure locking pin
- Mount and secure radar head onto tripod
- Ensure sandbags are used for stability

Programming

Select Speed, Mode and Power on the unit via the control panel.

- Select trigger speed using the rotary switch
- Select operating mode (Mode A or Mode B)
- Turn power on to activate the system
- Unit automatically detects approaching vehicles
- Real-time speed feedback is displayed using visual indicators
- Display brightness automatically adjusts via light sensor
- Vehicle data is recorded during operation
- Use the data reset button to view and clear recorded counts when required

Need Additional Support?

This guide provides a overview for field use. For full installation instructions, refer to the complete user manual available at www.rtl.co.nz

For technical support or product assistance, contact our team sales@rtl.co.nz or 0800 785 744.

Product Specifications

Physical & Construction	
Case Dimensions	450mm wide x 600mm high
Housing	Aluminium Powdercoated Black Finish
IP Rating	IP55
Cooling	Passive (no fans)
Base Type	Extendable Tripod with independently adjustable legs
Display	
LED Display	P16 RGB, 7-Colour LED
LED Display Dimensions	320mm wide x 320mm high
Resolution	20 x 20
Viewing Angle	120 degrees
LED Lifespan	100,000+ hours LED lifespan
Brightness	Auto adjusted via the Light Sensor
Legends	Retro-reflective Yellow front face with black SPEED CHECK
Radar Performance	
Radar Type	AGD
Beam Angle	12° (H) × 14° (V)
Detected Speed Range	11kph to 120kph
Detected Distance Range	16m to 180m
Power	
Battery Type	12v 20Ah LIFEPO4 Lithium Deep Cycle Battery
Run Time	12 - 20 Hours (site dependent)
Solar	40W Solar Panel & 12v Solar Regulator
Power Consumption	In operation mode < 500mA average
Charger	Mean Well PB-120N-13C battery charger
Control & Connectivity	
User Interface	Onboard - Speed Selector, Mode Toggle, Power Toggle & Data Reset
Selector Speeds (kph)	10, 20, 25, 30, 40, 50, 60, 70, 80, 90, 100 & 110
Ports	Hand Controller / Data port & Battery Charger port
Operating Modes	Speed limit & traffic speed with dual modes (A or B)
Data & Software	
Datalogger	Stores 10,000 time-stamped speed records
Stamp Source	Real time clock & calendar
Downloadable Data	Via RS232/ USB cable & Windows programme