Mobile Radar Signs

Real-Time 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
- Battery-powered operation (13-20 hours typical use)

Introduction

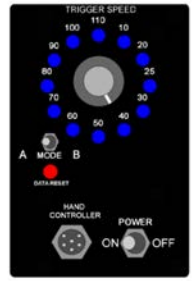
The RTL Mobile Radar Sign displays the speed of approaching vehicles in real time, prompting drivers to reduce speed and improve site safety across temporary traffic management (TTM) sites and infrastructure projects. The unit features a bright LED display, internal radar detection, battery powered operation, 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*

Proactive Speed Management - 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. As New Zealand moves towards a more risk-based approach to temporary traffic management, these devices provide a practical option for managing speeding risk 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. Basic setup involves positioning the tripod, securing the radar head, and adjusting height using the locking pin system. Always stabilise the tripod base using sandbags (shown below) and ensure the unit is fully charged before use.

The unit is configured via the onboard control panel, which is used to set trigger speed, operating mode (Mode A or Mode B) and power toggle. 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 without turning the unit off.

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 radar head onto tripod and secure using Locking Pin
- 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

Solar Panel Setup

The Mobile Speed Radar is supplied with a solar panel for battery top-up.

- Secure solar panel mounting bracket to top of speed sign
- Position solar panel facing north for best solar charging
- Plug solar charging cable into base of unit



Mains Charging

Using the supplied mains charge the speed radar can be charged between shifts.

- Plug in charger to base on Mobile Speed Sign
- Ensure the unit is fully charged before use
- **Note: Charger is suitable for indoor use only.**

LED Indication

- Stage 1: Charging
- Stage 2: Float Charge / Battery Full

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 Battery
Run Time	12 - 20 Hours (site & solar dependent)
Solar	40W Solar Panel & 12v Solar Regulator
Power Consumption	In operation mode < 500mA average
Charger	240v Mean Well NPB-240-12XLR Mains Charger
Charging Time	Approx 5 Hours
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	Battery Charger (underside of unit)
Cables	Solar Panels
Operating Modes	Speed limit & traffic speed with dual modes (A or B)

Need Additional Support?

This guide provides a overview for field use. For technical support or product assistance, contact our team sales@rtl.co.nz or 0800 785 744.