

School Road Safety Signs Controlled from the Web

School traffic zones are often bordered with active school zone signs, or 40km per hour speed signs. These signs need advanced sign controllers in them, if they are to consistently turn on and off at the correct times, on the correct days. Getting it wrong puts children at risk.



THE CHALLENGE

Active school signs need to be turned on and off consistently at the correct times, on the correct days.

Research showed it was unrealistic to rely on busy school staff to manually control the signs. Sign activation times were inconsistent. An automated sign controller was required, with advanced scheduling features supporting the varied and unique schedules of schools around the country.

THE SOLUTION

Advanced sign controllers with set and forget scheduling features can reliably activate signs, precisely as required. An easy-to-use web page gives each school control of their unique schedule.

Digital Telemetry sign controllers were installed inside active school signs. These controllers have advanced scheduling capabilities, which are used to activate signs precisely when required. Or, the signs can be turned on and off when required, without resetting the schedule. School staff control their school's unique and complex schedule via an easy-to-use web page. The schedules are sent to and held within the sign controller, so that network (or radio) connections are not required to turn the signs on and off.

Your Equipment

Active school zone traffic signs.

Xtensor® modem, with optional sign controller feature, connected to the sign's on/off control mechanism.

Your Connection

InvisiBridge® network using Vodafone GPRS link.

Your Access

Secured WWW site, where each school has a personalised login.

School staff manage their own schedule, using the web site. Council staff have access to all signs in their region.

Alerts and notifications are sent by email and/or SMS.

THE PAYOFF

Children are safer. School staff are relieved of an impractical and onerous task.

Automating sign scheduling means signs are activated precisely when they should be – consistently and accurately. Consistent, accurate sign activation gives drivers signals they can rely on, so they know for certain that there are children using a school zone ahead. Improved driver compliance and improved child safety is the result. Each school has complete control of their own unique and sometimes complex schedules. Control is provided via an easy-to-access, easy-to-understand web page... so people are happy to use it.

Variable Message Road Safety Sign Controlled from Web Site

The life of an aging variable message road safety sign atop Wainuiomata Hill has been extended with an upgrade, avoiding an expensive replacement. The message displayed on the sign is controlled from a web site, using a Rockwell industrial (PLC) controller installed inside the sign.

THE CHALLENGE

The aging variable message road safety sign had always been difficult to manage, then the radio link to it broke down completely. Replacing the sign was an expensive option. Upgrading it with a reliable remote control solution was much preferred.

THE SOLUTION

Digital Telemetry, together with a local engineering firm, designed and implemented an upgrade solution. It provides reliable remote control of the sign from a web page, for a fraction of the cost of a new sign.

A Rockwell Micrologix® industrial (PLC) controller was installed in the road sign. It has been programmed to control which message is displayed. Digital Telemetry InvisiBridge® network services link a secure web page with the PLC, allowing any authorised person to control the message being displayed.

Your data

Variable message road sign

Rockwell Micrologix® PLC industrial controller controls message displayed

Xtensor® modem controls the PLC and provides the wireless connection

Connection

InvisiBridge® network using Vodafone GPRS link

Your Access

A web page provides easy remote control of the sign message

Secure web site supports multiple authorised users from multiple organisations

Full audit logs of who changed the sign and when

THE PAYOFF

Significant cost savings were achieved by extending the life of the aging sign, instead of replacing it.

The replacement remote control solution is also more flexible and easier to use. The old solution was physically tied to a specific New Zealand Police location. The new web site solution improves responsiveness because authorised people in any location can change the sign, whether they be from New Zealand Police, New Zealand Transit Authority or the Hutt City Council.

Easier, more flexible, more responsive management of the sign means everyone is safer.