

School and Work Zone Advisory Signs



Excel Technology Group Pty Ltd (ETG) has designed and provided several alternative style animated driver advisory and regulatory display signs for schools zones, work zones, hazardous conditions and driver advisory functions.

The signs range from portable easy to assemble on site display solutions to permanent fixed site location displays. Displays may also be used in temporary applications where the advisory message is required for periods from a few days to a few months.

These signs may be operated locally by manual operator selection or automated time clock scheduling. An optional GPS based reference 'clock' may also be used for sites where regulatory display instructions are enforced at law by police. Additionally a GPRS or GSM type modem may be used for co-ordinated actuation from a central control facility. When this facility is used all local parameters and functions may be updated from the central control facility via the radio communication network.

A range of actuation 'display trigger' devices may be used to animate the sign. For example, speeding vehicles may trigger school and work zone signs during the regulatory operational period.

All signs utilise appropriate reflective passive sign material surfaces and integrated LED technology from reputable LED manufacturers. Control circuitry utilises solid state control systems, environment monitoring, and a range of power source from 240 volt AC supply to power management in battery/solar panel applications.



Advisory Display Applications

- School safe crossing zones
- Work safe zones (Occupational, Health and Safety requirements)
- Hazardous area advisory signs
- Open 'Rail' track activity advisory signs
- Driver advisory steep inclination
- Time of day actuated display animation
- Selected 'trigger' animation actuation (speed, presence, etc)
- Temporary warning signs
- Heavy vehicle caution signs
- HOV actuation within interchange precincts
- Kerbside pedestrian management and control displays
- Low current consumption battery – solar operation





Animated Display Signs Include

- Engineering design of circuit cards
- Engineering CAD display layout
- Integrated mechanical engineering design – housing and support
- Engineering software development of control system
- Engineering development of interface software
- Engineering development of manufacturing test procedures
- Engineering development of field maintenance procedures
- Engineering development of diagnostic software and test procedures

Design Specification Parameters

Physical Options

- Passive and animated sign components conform to regulatory requirements in size, shape and visibility
- Panel design offer maximum flexibility in size, maintenance and visibility
- Display weight - dependent on sign configuration, size and choice of power supply
- Trailer, vehicle and fixed display mechanisms available

Power Supply Options

- Operational voltage: Portable 12 Volts DC or 240 VAC fixed site
- Current Consumption depends on the number of LEDs

Communications Interface Options

- Optional remote command protocol for display control
- Optional remote monitoring of sign operation
- On-site control
- User configured time schedule operation

Light Output

- Yellow in colour as per CIE 1931 Chromacity (590 nms)
- Type of LED: Yellow AlinGap, output luminous intensity 3.2
- CD/LED daylight operation)
- Customer nominated pixel composition

Display Intensity

- Daylight mode - LEDs can be brightened to increase visibility
- Night time mode - LEDs can be dimmed to eliminate “flaring” (overly bright) and reduce current consumption
- Dimming facility - 8 levels, maximum output at 1100lx