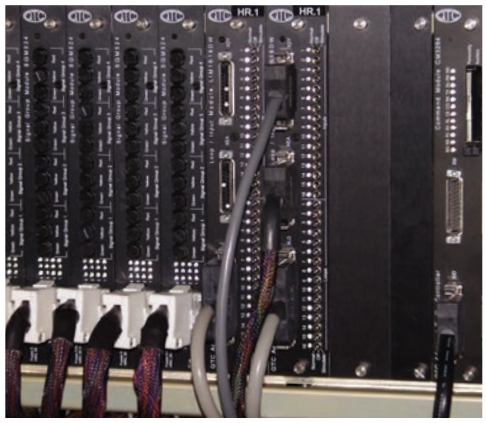
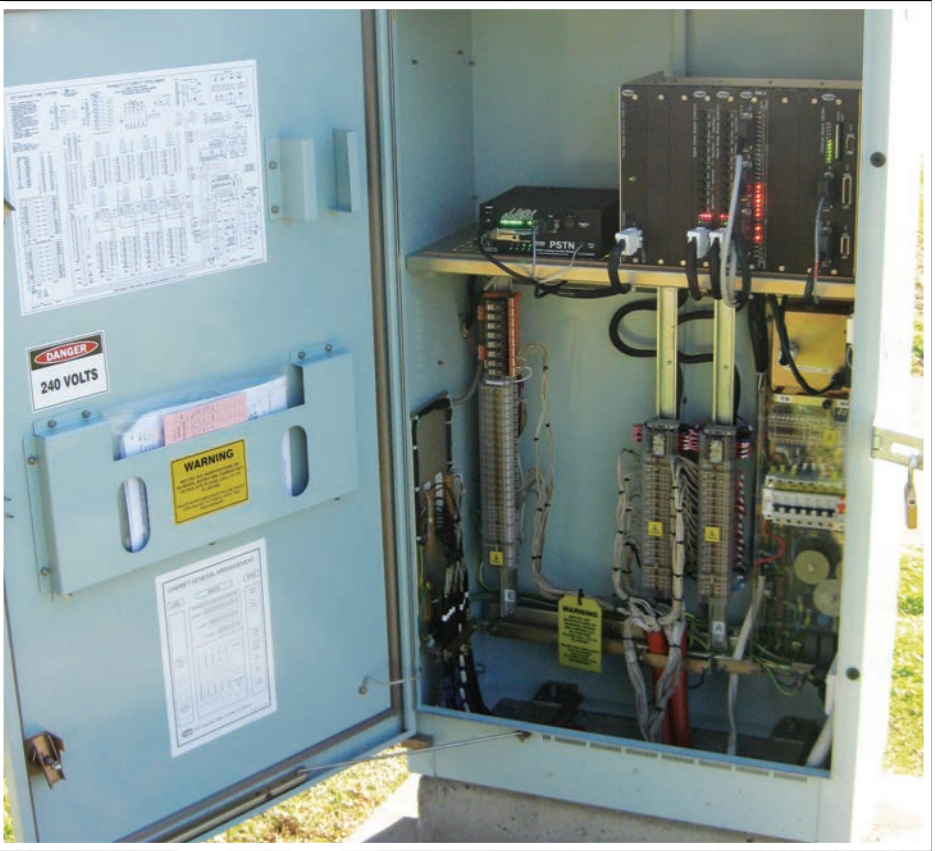
Aldridge Traffic Systems

A subsidiary of Traffic Technologies Ltd

TRAFFIC SIGNAL CONTROLLER





TRAFFIC SIGNAL CONTROLLER

ALDRIDGE TRAFFIC SYSTEMS DISTRIBUTES THE QTC TRAFFIC SIGNAL CONTROLLER. THIS IS THE LATEST GENERATION CONTROLLER DEVELOPED TO MEET THE REQUIREMENTS OF THE ROADS AND TRAFFIC AUTHORITY OF NSW. THE CONTROLLER IS FULLY SCATS COMPATIBLE.

WITH FEATURES SUCH AS LAMP MONITORING, CONFLICT MONITORING, LAST RED DETECTION, SYSTEM MONITORING, FAULT DETECTION AND REPORTING, THIS CONTROLLER ENSURES THE INTEGRITY OF SIGNALS DISPLAYED.

CUSTOMERS CAN BE ASSURED OF HIGH RELIABILITY AND ONGOING SUPPORT, TRAINING AND FIELD ASSISTANCE WITH THIS PRODUCT.

CONTROLLER FEATURES

- Cabinet Dimensions:
  1450mm High x 780mm Wide x 415mm Deep
- Modular design
- Switchboard easily accessible
- Latest in electronic technology
  - › 32bit bus architecture
  - › CardBus standard interfaces
  - › Up to V34 communication capability
  - › HDLC communication protocol capability
- Latest in manufacturing technology – Surface mount
- Remote reset of locked detectors
- Power Fail Backup
  - › Generator (optional)
  - › UPS (optional)
- Standard Operating Voltage 230Vac
- Easy change to 42Vac Operation
  - › Addition of suitable transformer
  - › Simple wiring changes
  - › Firmware change to Logic Rack (no hardware changes)
  - › All Logic Cards suitable for either voltage

CONTROLLER OPTIONS

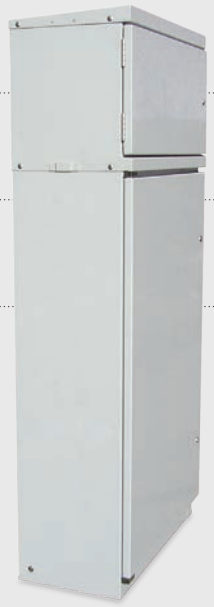
- Signal Groups – Available from 4 to 24 (future expansion to 32)
- Loop Inputs – Available from 16 to 32 (future expansion to 48)
- External Inputs – Available from 16 to 32 (future expansion to 48)
- Wait Outputs – Up to 8 outputs
- Daily Event Output – One available controlled by time of day
- Special Purpose I/O
  - › 8 special purpose inputs
  - › 8 special purpose outputs
- Logic Rack Standard Sizes
  - › 16 Signal Group
  - › 24 Signal Group
  - › 32 Signal Group (future expansion)

CONTROLLER PROGRAMMING

- Personality development software – NGEN
- Personality simulation software – WinTRAFF
- Paramics Modeling Interface
- Scalable Architecture
  (up to 32 groups, 48 Loops & 48 External Inputs)

SITE CONFIGURATION

- Site Personality deployed in Flash memory card
  - › Programmable in the Controller
  - › Programmable in Laptop
- Site ID located in housing checked for match with Personality ID for Controller to operate



MODULE SERIAL NUMBERS

- Module Serial Number and Software version available on the HHT and via SCATS
  - › Allows remote inventory control
  - › Assists with maintenance and upgrades

CONTROLLER OPERATING MODES

- Multiple standard vehicle actuated operating modes
  - › MASTERLINK
    Fully integrated in to the SCATS network
  - › FLEXILINK
    Time of day coordinated with other controllers in the region
  - › ISOLATED
    Standalone (Vehicle actuated or fixed time)
- Can be integrated with variety of other systems
- VMS and VSS interface

SIGNAL GROUP DISPLAYS

- Solid state switching
- Up to 1200 watts per signal group
- Full range of Lantern Types
  - › Incandescent (230Vac)
  - › Quartz Halogen (incl transformer)
  - › LED (230Vac or 42Vac)
- Lamp monitoring
- Lamp Dimming
  - › All Signal Groups
  - › Individual Signal Groups (non dimming may be required for some applications)

CONTROLLER SAFETY FEATURES

- Watchdog Timer to verify correct software operation
- Conflict Monitoring to prevent dangerous Signal displays
  - › Dual Conflict Monitors
  - › Lamp Drive Mismatch
  - › Pre Conflict Checking
- Last Red detection for enhanced safety
- Flashing Yellow failsafe fallback
  - › Independent hardware flasher
  - › Flashing Yellow provided when Logic Rack is in Fault Mode or removed

USER INTERFACE

- Menu based Hand Held Terminal
  - › Terminal with 4x20 LCD display and keypad
  - › iPAQ handheld computer (with Bluetooth option)
  - › PC/laptop computer (with Bluetooth option)
- Error types reported in English
- Operational Parameters monitored or changed
- Controller Status Report
  - › fault log downloaded for detailed diagnostics
- Test Mode for verifying on Site Cabling
  - › Cable Test – to check for O/C or S/C conditions
  - › Lamp Test – to check for correct termination of cables to signal group displays

CONTROLLER COMPLIANCE

- TSC/4 Traffic Signal Controller Specification of RTA (NSW) Australia
- SCATS compliant
- AS4251.1 (CISPR22 Class B)
- AS4252.1 (EMC)
- AS60950 (Electrical Safety)
- A-tick
- Environmental protection to IP45

Aldridge Traffic Systems Pty Ltd
12 – 14 Leeds Street, Rhodes, NSW 2138
P: 02 9736 3677
F: 02 9736 3391
E: info@aldridgetraffic.com.au
W: aldridgetraffic.com.au

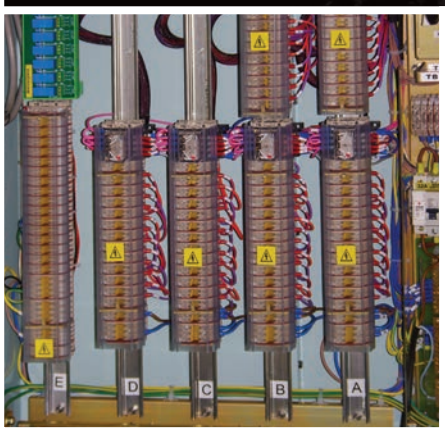
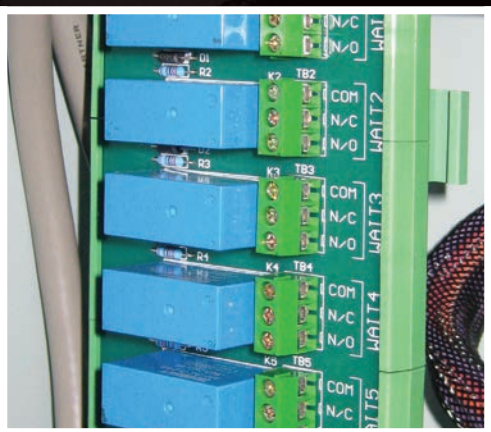
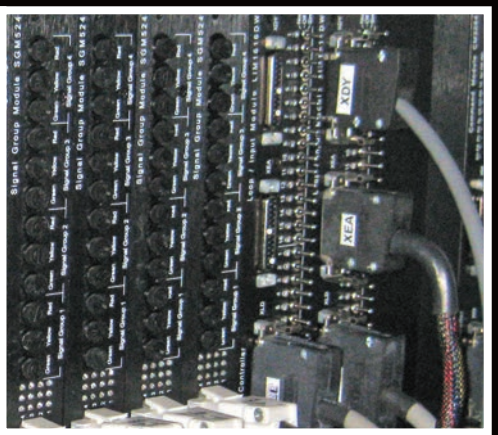
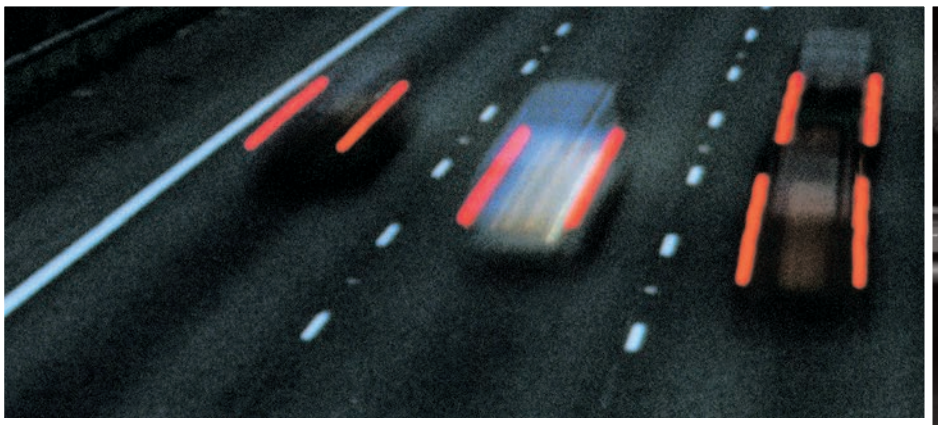
Victoria
P: +61 3 9430 0222
F: +61 3 9430 0244

New South Wales
P: +61 2 9736 3677
F: +61 2 9736 3391

Queensland
P: +61 7 3266 1900
F: +61 7 3266 2244

Norsign
P: +61 8 8947 0733
P: +61 8 8947 0713

Auckland
P: +64 9829 2680
F: +64 8374 0651

traffic® technologies.ltd

A subsidiary of Traffic Technologies Ltd