

SHUTTLE TRAFFIC SIGNALS

Aldridge Traffic Systems (ATS) Shuttle Traffic Signal (STS) utilises the latest in microprocessor and RF technologies to provide a cutting edge product.

The STS is a dual-control system, which consists of a Master and Slave unit. Both units are housed in an IP55 rated enclosure with a built-in 240Vac 50Hz power supply and battery back-up system.

The battery backup is suitable for up to 6 hours of operation. The battery charger requires at least of 16 hours to charge a flat battery.

A Liquid Crystal Display (LCD) and keyboard provides a user friendly menu driven interface that allows for on-site configuration and diagnostics with the built-in fault log and warning system.

Status and Mode indicators on the control units provide feedback on the status of the signal lanterns and the mode of operation.



FEATURES

- Powered by 240V AC (Mains Supply)
- Battery backup up to 6 hours operation
- Built-in Battery charging system
- Single Lane Shuttle Control
- Radio Link Master/Slave operation (optional Cable Connection)
- Infra-red beam detection for vehicle detection
- Designed for RTA Equipment Specification No. PTS/3 for Portable Traffic Signals part A and B
- Compliance with AS4191:1994 and other standards available
- LCD with user friendly menu and Keyboard interface
- Built in fault log and Warning on Display
- Fail-safe operation under fault
- On-site configurable
- Uses Aldridge Signal Lanterns which are compliant with Australian and International standards
- Australian designed and Manufactured
- IP55 control enclosure
- IP35 Signal Lanterns (IP65 optional)
- U.V stabilised components
- Modular components for easy maintenance

The STS is typically used on construction sites or road work sites where two-way traffic is reduced to a single lane that is alternated between directions (Shuttle Operation). It can be used anywhere there is a requirement to converge two-way traffic down to a single lane, such as a car park entrance, or a truck loading dock, etc.

Shuttle Operation can be operated automatically by an infra-red beam detector (or a microwave detector) that senses approaching traffic, or cyclically on a fixed time basis. Disconnecting the vehicle detector will place priority (i.e. defaults to green) on the direction controlled by the disconnected controller. Disconnecting both vehicle detectors will revert to the fixed time operation. (Note: when operating on backup battery the vehicle detectors are disabled and the system operates on a fixed time basis).

Infra-red Beam Vehicle Detection of approaching traffic has a rated range of 6m (a width of up to 2 lanes). It can detect at a maximum frequency of 20 Hz.

Microwave Vehicle Detection of approaching traffic has a typical range of 35m with a width of up to 2 lanes. The minimum detection speed of approaching traffic is 8 km/h, which can be adjusted to 4 km/h.

MODES OF OPERATION

- Vehicle actuated Shuttle Auto
- Fixed cycle Shuttle Timed
- Yellow Warning Flash
- All RED
- Blank

INFRA-RED BEAM DETECTOR

- Rated range of 6m (width up to 2 lanes)
- Maximum Detection Frequency of 20 Hz
- IP67 enclosure

MICROWAVE DETECTOR (OPTION)

- Typical range of 35m
- Detection width up to 2 lanes
- Minimum detection speed of 8 km/h (adjustable to 4 km/h)

RADIO COMMUNICATION LINK

- 900Mhz operating frequency
- Channel Hopping
- 1 km range (line of sight)



SIGNAL LANTERNS

- Visual range of 100m
- Meets all requirements of AS/NZS2144:2002
- High luminous output
- IP35 protection (IP65 optional)
- Coloured lens in compliance with colour requirements of CIE/AS/NZS2144:2002
- LED type with long term reliability and operational life

POWER SUPPLY

- 240 Vac 50Hz input / 13.8V dc output at 4.5A
- 7.2 A hr 12V sealed lead acid battery
- 13.8 Vdc 0.5A Battery charging

DIMENSIONS

- (W x H x D mm):
- Enclosure: 400 x 400 x 200
- Mounting Plate: 400 x 500 x 3
- Total Enclosure Dimension: 400 x 880 x 203
- Traffic Signal: 260 x 858 x 208

WEIGHT

- Enclosure: Under 18 Kg
- Traffic Signal: Under 10 Kg