

B-Scout

Control & Monitoring System



The B-Scout control and monitoring system provides reliable and effective tunnel lighting control. Designed to operate with the Indal tunnel luminaire range, and with the extensive available options, the system can be adapted to operate in almost any situation from small underpasses to major motorway tunnels. Distributed control is provided by the unique i-Tunnel B-Scout controllers or via DALI (optional) enabled ballasts.

Applications

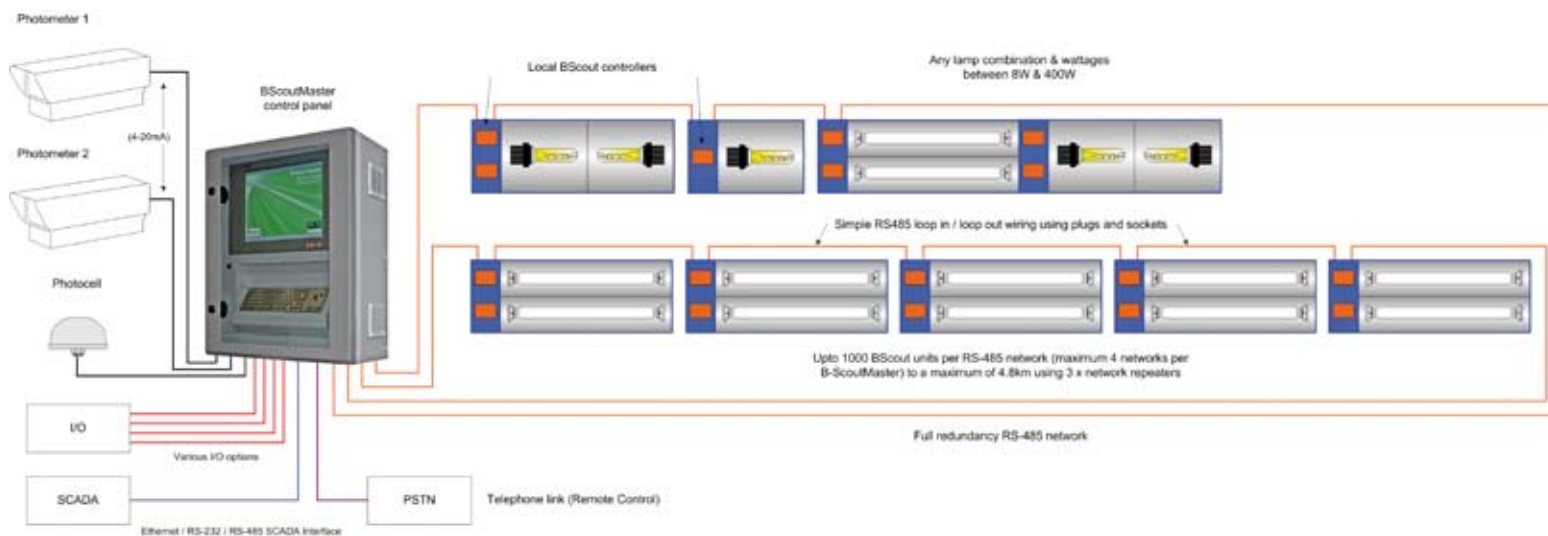
Road Tunnels & Underpasses
Car Parks & Subways
Interchanges

Communications

RS-485
DALI (optional)
Ethernet
RS-232

The B-Scout System provides a fully integrated intelligent lighting and control system for road tunnels. Our unique expertise in this area is proven to reduce installation and lifetime costs, improve reliability and, of course, make the management of tunnel lighting simple.

The B-Scout System incorporates all the advantages of intelligent, digital control of individual lamp switching and dimming, whilst retaining all the cost saving elements. In addition, the B-Scout System will gather information from every single luminaire and create lamp and status reports and other information such as lamp burn hours and faults. Detailed history reports of events and values can be viewed, printed and transmitted externally. With the B-Scout System you can take total control of your tunnel lighting.



General operation

The photometric data from the photometers is damped by a rolling average and then used to derive the lighting stage appropriate to the ambient luminance levels outside the tunnel. Following a delay period (introduced to avoid spurious switching caused by clouds etc) the B-ScoutMasters instruct each individual B-Scout unit to switch it's respective lamp 'on', 'off' or 'dim' creating the required lighting pattern to provide the necessary luminance levels.

The system employs cascade switching, and local soft-switching mechanisms (zero volt 'no-load' switching) which greatly reduce in-rush currents, often leading to increased lamp life and reduced false switching of circuit protection devices. The B-Scout units constantly monitor their loads and report to the B-ScoutMaster any irregularities and lighting failures. Any lamp found to be faulty will invoke a 'lamp compensation' routine, whereby a suitably sized lamp within the vicinity of the failed lamp will be brought on to compensate for the localised drop in luminance.

All reported information is collated by the B-ScoutMaster and can be viewed locally using the 17 inch high definition touch screen display or remotely via the local SCADA system. Information regarding lamp burn hours, current lighting stage and system status will also be available to the SCADA system. Complete control of the system along with the facility to make changes to the configuration and view system reports can also be carried out locally or remotely.