Locally developed parking guidance system on the move

JVES (Joint Ventures Electronic Services), in association with Park with Spark, installed a parking guidance system (PGS) in Arbour Square, Braamfontein, Johannesburg.

A busy section within Killarney Mall, occupying 75 parking bays, was recently installed – as well as a pilot installation in Southgate Mall.

The PGS assists drivers in finding parking quicker and easier, while minimising congestions, and at the same time maximising occupancy.

According to Clinton Alley from Park with Spark, "We see a growing trend locally and overseas towards bay monitoring systems. In fact in Europe most new projects are specified with bay monitoring by the architects at the design stage. Such systems make the parking experience so much easier while providing our IT department with essential statistics that we can then use to utilise the parking areas more efficiently. We believe that in a decade most underground parking lots will be equipped with bay monitoring systems and we will be part of this development."

Reduced driver frustration ➔ Another way to improve customer service
Although difficult to quantify, one cannot ignore the frustration experienced by drivers when looking for parking in a busy shopping mall or office building. Frustrated people may spend less time in the facility or even go elsewhere.

Management of dead ends ➔ Increase number of parking bays
In the design of the parking lot, dead ends are generally avoided as they can create traffic jams. The PGS system nullifies this concern allowing optimising of all parking bays at the end of lanes, especially shorter lanes with hidden parking spots.

Reduced driving time and ventilation time ➔ Reduced gas emission
Less cars aimlessly driving around at any given moment significantly reduces the toxic gas emission – the PGS system analyses the movement and controls the fans as required – saving energy and further reducing the cost of running the parking lot.

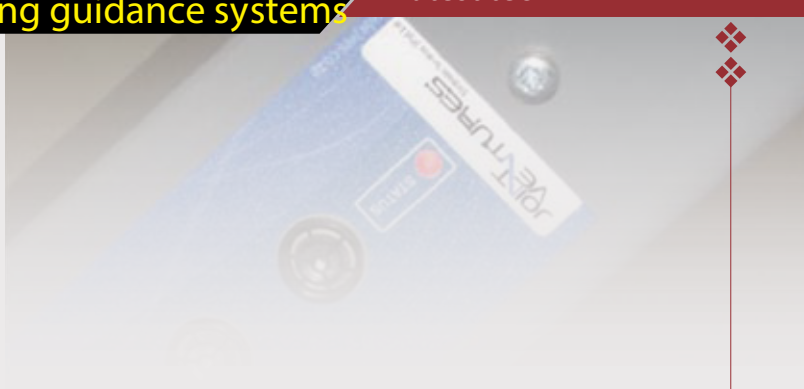
Parking guidance system ➔ Lead the way
Parking guidance systems are gaining popularity all around the globe, and continue to penetrate becoming the norm and not the exception.

We, as customers, drive and park at various facilities as part of our daily activities. When we encounter a parking guidance system, we are so appreciative of the facility, and only hope that we would have an easier parking experience in other locations.

By providing your customer with this innovative service, you will lead the way.

PGS control room
An extensive PC application that controls the entire system as follows:

- Collects the parking status from the entire parking area via the PGS buffers.
- Controls all the PGS traffic lights and all the PGS numeric displays.
- Provides real-time occupancy information.
- Provides real-time graphic display of the entire system with the status of each parking bay, each traffic light and each numeric display.
- Issues daily, weekly and monthly occupancy reports regarding a single bay, single zone or the entire parking lot.



The PGS bay sensors consume only 20 mA at 15 V and use a daisy chain communication architecture. These two properties bring the number of sensors that can be connected to one data buffer and power supply unit to 256. Another innovation is an "auto mapping" utility which eliminates the need for unit address and the need for site-mapping.

The system allows up to eight logical zones to be defined and up to 256 bay monitors, 24 guiding lights and 12 numeric displays can be connected and managed by a single data buffer unit without the need to write a single line of code.

Occasionally JVES identifies niches and opportunities, and then develops its own products. The PGS is one such product. Right at the feasibility study stage of the project it was clear that the major cost of all the existing parking guidance systems lies with their installation, wiring, commissioning, mapping and site-dedicated software. JVES therefore designed its system "backwards," by first defining the most cost-effective installation and wiring. It then developed the hardware and software to suit, bringing its price per bay to half the price of any existing system, according to JVES.

The PGS will benefit any undercover parking lot such as: shopping centres, parking arcades and corporate office buildings with unallocated parking.