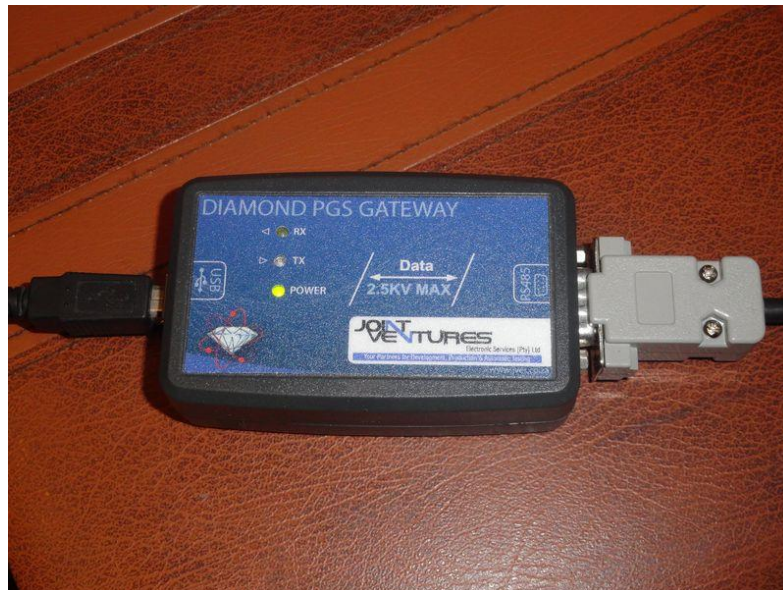


## The Diamond Parking Guidance System – USB Gateway

### 1. General

The ControlRoom communicates with the system over a multi-drop RS485 communication array. The Diamond PGS Gateway is the USB to the Diamond Parking Guidance System adaptor.



### 1.1 Main features

- Plug & Play - Automatically detected and configured.
- Bus powered, requires no external power supply.
- Lightning protection on all inputs and outputs.
- Status LED for easy fault detection.
- Hot swappable.
- Low cost.

### 1.2 Operation

The PGS Gateway is a dedicated USB to RS485 converter.

The ControlRoom application communicates with and controls the Diamond Parking Guidance System via the PGS Gateway.

The PGS Gateway is equipped with communication status and power LED.

This document must be read in conjunction with the “PGS Terminology.Pdf” available on our website.

## **2. Detailed description**

### **2.1 USB Isolation**

The Diamond PGS Gateway provides galvanic isolation between the ControlRoom PC and the system. The isolation provides better safety and higher noise immunity on the typically long communication lines between the system and ControlRoom.

### **2.2 Communication**

The communication hardware is a standard, multi-drop RS485 communication.

### **2.3 Detection and configuration**

A unique identification written into the PGS Gateway enables its automatic detection and configuration by the ControlRoom application.

### **2.4 Status indicator**

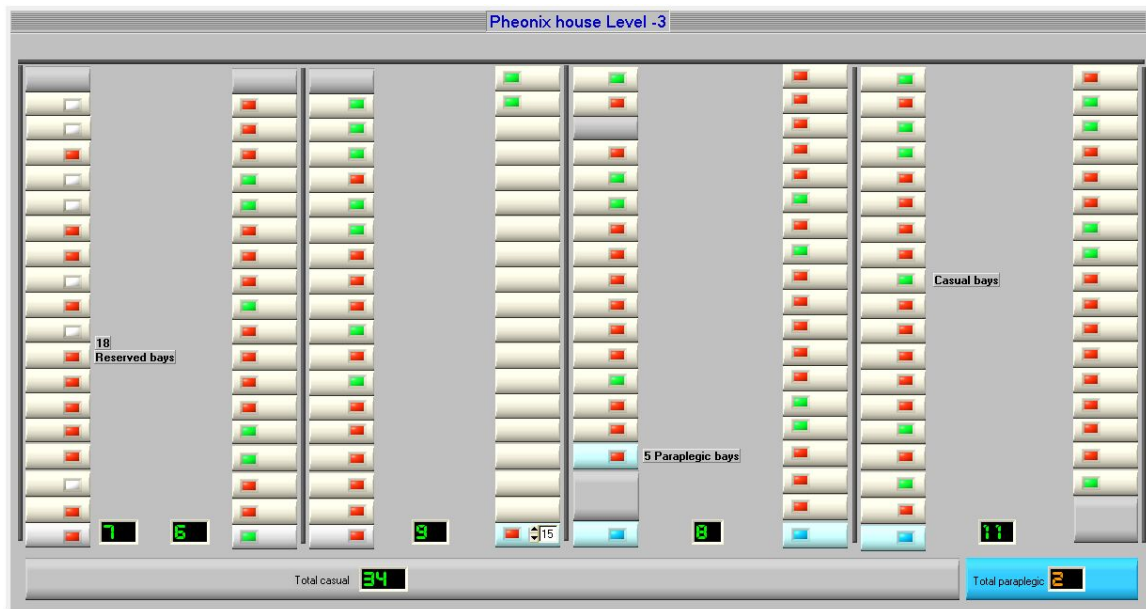
Each PGS Gateway is equipped with three LED indicators. The indicators provides information regarding the communication and the operation of the Gateway as follows:

- Power indicator – Green LED indicates that the PGS Gateway is connected to a USB port and that the internal power supply is operational.
- Transmit indicator – Red LED blinks whenever the device sends data to the system.
- Receive indicator – Yellow LED blinks whenever the device receives data from the system

### 3. Application examples



Typical site



Typical ControlRoom site presentation

#### **4. PGS Gateway detailed specifications**

<b>Power supply</b>	USB Bus powered
<b>Power consumption</b>	Less than 300mW
<b>Communication protocol</b>	RS485
<b>Material</b>	ABS
<b>Housing</b>	IP56
<b>Operating temperature</b>	-20 <sup>0</sup> to +70 <sup>0</sup>
<b>Storage temperature</b>	-40 <sup>0</sup> to +85 <sup>0</sup>
<b>Safety Standard</b>	IEC 60950-1
<b>RFI/EMI Standard</b>	IEC 61000

#### **5. Ordering information:**

PGS-Gateway