

CONCEPT 32 - PETS 'Wedge' Operator Alarm Display Unit

The PETS system allows road users to warn the Railway signaller in case of hazards on the crossing. An automatic monitoring facility checks the operational status of the crossing barrier equipment, telephone handsets and the transmission path.

The STS Rail PETS Interface allows up to four telephones at a railway level crossing to be linked directly to a **CONCEPT 32 or CONCEPT 16** telephone concentrator system, via an existing PETS trackside unit manufactured by Whiteley Electronics Ltd.

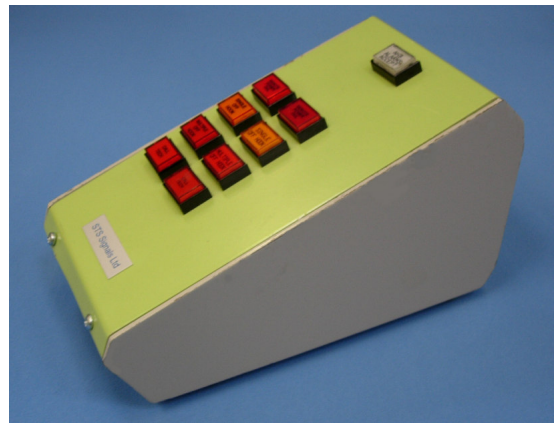
See Technical Data Sheet SIG/508 for a full description of PETS operation and configuration.



Automatic Half Barrier Level Crossing equipped with a Public Emergency Telephone System (PETS)

A **PETS Alarm Accept** push-button is provided on the Signaller's keypanel and is used to acknowledge alarms from the PETS trackside unit. The pushbutton is dual purpose since its integral lamp provides visual indication of the system power-on condition, and also provides a lamp test and audible alert test function if held for more than 2 seconds.

The PETS alarm display unit may be integrated within a free standing keyboard or console mounted keypanel. A stand-alone unit (PETS 'Wedge' illustrated below) is also available for retrofit applications ensuring minimum disruption to the Concentrator system.



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System Configuration

The PETS Interface comprises one or more PETS Line card, and a PETS Alarm card and Alarm Display. In addition to the speech facility, the PETS interface raises alert signals to the Signaller in the event of certain fault conditions.

The **PETS Line card** occupies one card position in a standard CONCEPT 32 equipment shelf or CONCEPT 16 enclosure, and enables all calls from the level crossing to be answered using the Concentrator keypad handset.

The connection to the remote PETS trackside unit is via a 2-wire (voltage free) interface, and carries both speech and DTMF signalling using a Magneto (LB) interface.

Two call handling modes are available:

- **'Solo' mode** – the four external telephones are assigned to individual push-button indicators on the Signaller's keypad.
- **'All-Call' mode** – the four external telephones are presented on a single push-button indicator on the Signaller's keypad

Note that four push-button indicators are allocated to each PETS Line card regardless of which handling mode is being used.

All status changes detected by the PETS trackside unit are passed to the Concentrator and are displayed as individual LED's on the front edge of the PETS Line card. Alarm data may be relayed to any external location via an RS485 data interface.

PETS Alarm card and Alarm Display.

The PETS Alarm card is mounted within the Signaller's keypad and alarm information is presented on the keypad as a group of four indicators –

- Red = Crossing PSU fault**
"Remote Power Fail"
- Amber = One phone off-hook**
"Single Off-hook"
- Red = >Two phones off-hook**
"Multiple off-hook"
- Red = Crossing system failure**

