



## Page Party Line Processor

### Description

The BARTEC VODEC VXS-8 is a compact 1 unit 19 inch rack mount unit designed to allow subscribers to address PAGA broadcast loudspeaker networks and to support up to eight discrete party line communication channels.

Each VXS-8 shelf provides connection for up to sixteen handsets with cascade switching capability to maximum of 512 stations.

The unit is connected to the host panel by locking quick release flat ribbon cable connectors which enable rapid installation/service.

VXS-8 consists of a robust enclosure which houses a single surface mount (SMD) P.C. style motherboard, fascia mounted LED status display array and rear panel plug/socket connectors.

The page/party system handsets are connected to the VXS-8 switch by a noncritical standard 2 twisted pair 18 AWG minimum size shielded/ screened field cable.

No special multi core cables are required with this system. Field cables are landed onto VXS-8 port which is equipped with screw terminations ribbon cable conversion to allow direct connection to the VXS-8 switch.

VXS-8 incorporates VSOC (BARTEC VODEC system on a chip) technology that obviates conventional software based solutions.

This eliminates possible latent software bugs, software license requirements, reboot/boot ups following supply brown outs and vastly improves EMC tolerance.

The VXS-8 switch extends paging capability to all handsets, enabling single button address of PAGA system loudspeakers on a "push to page" release to party basis.

Possible risk of acoustic feedback due to proximity of a PAGA loudspeaker to a live subscriber handset is obviated, by either real time muting (RTM), or digital delay feed forward (DDF).

VXS-8 obviates antiquated technology, mechanical rotary switches and instead, employs modern vandal resistant push button key pads, which have become commonplace on conventional telephone apparatus.

The VXS-8 switch also allows subscribers to establish point to point selective telephone PBX style communications, in addition to the embedded eight party line connectivity.

This maybe be implemented by incorporation of an automatic telephone switch either within the PAGA system or as an interface to a PABX external to the BARTEC VODEC package.

### Features

- 8 party lines
- Dual priority emergency/routine paging access
- Integrated status display
- Selective point to point communications
- Multiple simultaneous conversions
- Operational call and safety emergency access
- Private handset speech

### Technical Data

#### Supply

DC 48 V + 15 %

#### Consumption

350 mA

#### Number of P3 subscriber inputs

16

#### Subscriber interface

4 wire

#### Weight

1 kg

#### Dimensions

483 mm wide (19" rack mount)

44.5 mm high

160 mm deep

#### Heat emission

2 W

#### Temperature range

-20 °C to +60 °C

#### Operating system

VSOC (BARTEC VODEC system on a chip)

## VXS-8 subscriber operation

The VXS-8 system operates in three modes:

- Handset paging over secure PAGA loudspeaker networks
- Open party line handset communications
- Point to point PABX based selective private handset communications

To enter "page" mode, the subscriber lifts the handset and depresses "push to page" button and maintains whilst delivering the paging message. Upon message completion the "push to page" button is released. Paging is delivered to the PAGA loudspeakers on a "routine priority" level and is over-ridden by other higher priority PAGA access sources.

The VXS-8 allows the subscriber to manually select one of eight open channel party lines. Party lines are non private.

To access the party bus switch the subscriber lifts the handset and depresses the party line button momentarily. The subscriber can then select the party line number as required. When the user returns the handset to the cradle hook the selected party line is released. It should be noted that party line talk time can be limited to obviate possible spurious party line engagement due to handset left off hook following a party communication.

The user may "hop" from party line to party line by repeating the party line process selection.

The panel can be equipped with a PABX or can be interfaced to an external PABX switch. Where this facility is included the P3 subscriber can initiate point to point conventional selective telephone communications.

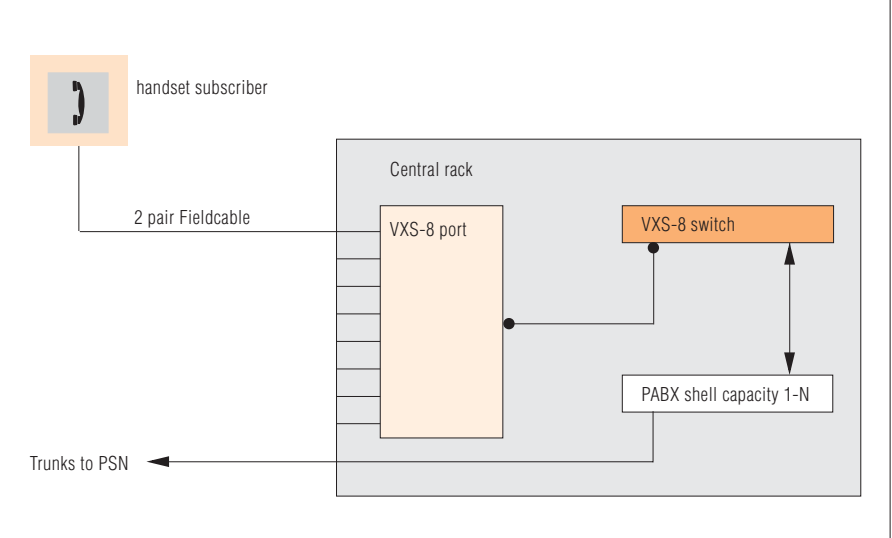
At any time the subscriber can leave the PBX architecture and enter either page or party mode by depressing the appropriate page/party button.

The VXS-8 switch is fitted with a comprehensive LED display that clearly provides the following details:

- Subscriber page status routine/emergency
- Subscriber party bus selected status
- System status

The VXS-8 is connected to the host PAGA system by a single ribbon cable which carries emergency, routine paging access as well as phantom DC 48V power supply.

**Diagram** Simple diagram showing arrangement with integral PBX capability.



**Diagram** Simple diagram showing arrangement with external PBX capability.

