



VX/AT Management Central Switch

Description

The BARTEC VODEC VX/AT is designed to provide access priority and zoned area switching of electronically generated alarms and live voice program inputs as a central component of a high integrity Public Address and Alarm (PAGA) broadcast system.

The VX/AT unit comprises of a low profile space saving 1 unit high 19 inch enclosure 160 mm (6,5 inch) minimal depth enclosure. As standard the VX/AT switch accepts connection of up to four microphone access control positions, expandable to client specification.

The unit generates a selection of secure alarm cadences and provides interface to other telecommunication packages:

- Entertainment distribution system
Muting in emergency
- Telephone system
Telephone subscribers can store and replay messages over the PAGA loudspeakers (VODEC RP8 required)
- Fire and Gas Detection system
Automatic initiation of PAGA alarm tones
- Supervisory system
PAGA trouble warnings
- Un-interruptible power supply
Secure mains supply to PAGA

A single BARTEC VODEC VX/AT switch can automatically supervise

- up to 64 or 512 power amplifier modules VA300+
- up to 32 microphone access panels
- battery charger
- flashing beacons

The unit incorporates comprehensive signal processing to ensure highest speech intelligibility.

The LED diagnostic display and test tone/supervisory reset control, enables the engineer to issue test tick tone on a zone by zone basis.

Supervisory routines automatically check critical path performance from operator microphone through to loudspeaker network and end of line devices.

The complete unit is connected to the host amplification equipment by "quick release" plugs and sockets. This allows rapid service replacement on a plug and play basis. VX/AT switch generates both IMO and PFEER/NORSOK alarm tone menus with alternative alarm tone cadences/frequencies readily programmed on request.

Alarm tones are fully monitored and the package is equipped as standard for high criticality duplicated A/B system operation. The alarm tone package is fully synchronised when used in A/B applications. Service is maintained in the event of failure of an alarm tone generator in either A/B system.

Priority access ensures that routine broadcasts are automatically over-ridden by critical input requests.

BARTEC VODEC System on a Chip

The VX/AT switch is based upon highly secure VSOC technology which obviates sequentially executed stored program. Instead the VSOC chip is configured by tamper-proof switches located inside the unit.

This eliminates dependency on PCs and flash memory that are not sufficiently secure enough for a life safety system. The user is able to make limited configuration changes to the PAGA system with training. No annual software licence is required to run the VX/AT switch.

Features

- System on a Chip Technology
- Up to 32 microphone access panel inputs
- Supervises up to 512 amplifier modules
- Fully supervised critical path
- Interfaces to other life critical systems

Technical Data

Power supply

DC 48 V

Consumption

25 W

Heat emission

10 W

Voice inputs

- 2 x VAP30 as standard
- 2 x VAP01 as standard
- 2 x Auxiliary audio
- 1 x telephone interface

Alarm tones

- 4 x IMO
- 4 x PFEER/NORSOK

Broadcast zones

4 zones

Test tick tone

1 kHz tick issued at second intervals

Compression on voice inputs

up to 40 dB

Frequency response

150 Hz to 7 kHz
tailored to optimise speech intelligibility

Line monitoring level

-6 dB

Audio input/output level

0 dB

Audio VAP input level

-3 dB

Dimensions

483 mm wide (19" rack mount)
44.5 mm high (1 unit)
160 mm deep

Weight

1.4 kg

Temperature range

-20 °C to +50 °C