Management Central Switch VX/AT-M

- System on a chip technology

- Supervises up to 512 amplifier modules

- Interfaces to other life critical systems

The PSC VODEC VX/AT-M 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 (PA/GA) broadcast system. The VX/AT-M 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-M 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 PA/GA loudspeakers (PSC VODEC RP8 required)
- Fire and Gas Detection system, automatic initiation of PA/GA alarm tones
- Supervisory system, PA/GA trouble warnings
- Un-interruptible power supply, secure mains supply to PA/GA

A single PSC VODEC VX/AT-M 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-M 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.

PSC VODEC System on a Chip

The VX/AT-M 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 PA/GA system with training. No annual software licence is required to run the VX/AT-M switch.

Technical data

Power supply	DC 48 V
Consumption	25 W
Eat emission	10 W
Voice inputs	2 x VAP30 as standard (expandable) 2 x VAP01 as standard (expandable)
	2 x auxiliary audio 1 x telephone interface
Alarm tones	4 x IMO 4 x PFEER/NORSOK
Broadcast zones	4 zones as standard (expandable)
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 (width x height x depth)	483 mm x 44.5 mm x 160 mm (19.02 inch x 1.75 inch x 6.30 inch) (19" rack mount, 1 unit)
Weight	1.4 kg (3.1 lbs)
Temperature range	-20 °C to +50 °C (-4 °F to +122 °F)