



- Detail LED diagnostics
- Redundancy of the main system components
- Remote fault report output



PSC VODEC PA/GA Public Address and Alarm system is specifically designed for critical life safety applications. To improve system availability the PSC VODEC PA/GA system can be configured in an N+1 architecture. N+1 denotes that certain key front end parts of the PA/GA system are duplicated with the second hardware set being held in hot-standby. N+1 can apply to loudspeaker power amplifiers and/or host management according to client specification. In either case field equipment is not duplicated in N+1, i. e. there are non-redundant loudspeaker/beacon networks. Amplifier replacement is automatic and in addition to supervision of on-line amplification the standby amplifier is monitored also. For ultimate security A+B fully duplicated architecture should be specified.

The PSC VODEC VA300/CAGE is fitted with N+1 capability for power amplification as standard. Each VA300/CAGE can support 8 X VA300+M amplifiers out of which it is possible to simply configure slot 8 as hot-standby for the remaining (up to) seven on-line amplifiers. It is possible to extend the hot-standby to provide support for on-line amplifiers sited in other VA300/CAGE(s) if desired, e. g. system fitted with twenty VA300+M amplifiers (slot 21, 22 and 23 are spare) slot 24 is hot-standby for amplifier 1 - 20. Hot-standby amplifier can be assigned for

- Every seven “on line” amplifiers
- Every three “online” amplifiers
- Single hot-standby can support all “on line” amplifiers up to maximum of sixty four.

For greater system security the VX/AT-M management processor is not configured to enable hot-standby of all switching functions, alarm generation and operator access unit management. For this application the operator access units feature duplicated N+1 transceivers and microphone transducers. A PSC VODEC NT4 facilitates selection of VX/AT-M on a master/standby basis.

Technical data

Supply	DC 48 V from host VX/AT-M switch
Dimensions (width x height x depth)	111 mm x 222 mm x 60 mm (4.37 inch x 8.74 inch x 2.36 inch)
Weight	0.38 kg (0.8 lbs)

NETWORK PORTS FOR N+1 PA/GA CONFIGURATION

The NT4 and NT44 ports allows the implementation off the “N+1” front end architecture in a high security PAGA system. The NT4 is designed to allow 2x VX/AT-M management units to be fitted to a single rack N+1 configuration i.e. one management unit on-line, second as hot-standby.

The module is interposed between the on-line and hot-standby management units and target VA300/CAGE-M system power amplifier sub-system. In a normal situation the amplification is managed by the on-line VX/AT-M unit however in event of a major fault condition, control of the system power amplifiers is automatically transferred to the hot-standby management unit thereby maintaining PAGA broadcast capability.

The NT44 port is designed to allow loudspeaker mute ports to be configured on an N+1 basis.

NT4/NT44 ports are connected to the system via ribbon cables, VX/AT-M management unit controls the VA300+M amplifier set via two ribbon cables - cable „1” carries PA/GA audio, and cable „2” carries data. Both ports facilitates complete duplication of the PA/GA management system and operator microphone access unit with the duplicated elements configured on “hot-standby”. The intent is that a major failure in the on-line management/ access facilities shall not inhibit the normal operation of the PA/GA, instead the hot-standby PA/GA sub-system provides continued no break service.

