

# SELF-CONTAINED VOICE ALARM SYSTEM



- INTEGRATED IP AUDIO NETWORKING
- SIMPLE INSTALLATION
- HIGH EFFICIENCY
- PRE-INSTALLED WITH 3, 5, 7 OR 10 AMPLIFIER CARDS
- UP TO 500W PER AMPLIFIER CARD
- UP TO 2000W TOTAL LOAD
- DC / IMPEDANCE / LOOP LOUDSPEAKER MONITORING
- EN 54-16 AND EN 54-4 COMPLIANT
- DANTE ENABLED

## OVERVIEW

ASL's INTEGRA all-in-one network enabled voice alarm solution is available with three, five, seven and ten channels of amplification. The unit has 12 audio inputs and internal storage for up to 64 recorded messages. With a maximum power of 2000W, integrated audio-over-IP networking, powerful audio processing, and integrated battery charger and battery mounting shelf all in a compact wall-mount enclosure, INTEGRA provides a complete voice alarm solution for both medium to large centralised and decentralised PAVA systems.

## NETWORK AUDIO

Up to 32 INTEGRA can be linked over IP to enable broadcasts from any location to any combination of zones in large decentralised systems. ASL's Ethernet switches enable a voice alarm compliant ring network topology. INTEGRA and the rack mount equivalent VIPEDIA range interoperate seamlessly.

For specialist multi-user, cross-platform applications or systems that require ultra-low latency networked audio Dante® maybe used. In this scenario, Dante® traffic can exist on the ASL IP network or can be easily segregated via dedicated Dante ports®

## AMPLIFICATION

Five variants are available, with either 0, 3, 5,7 or 10 channels of amplification. One amplifier can be configured as either a standby or active amplifier. Each individual amplifier can deliver up to 500W, with a total maximum overall load on one INTEGRA of 2000W.

Each amplifier provides dual isolatable A and B loudspeaker circuits and supports both DC and Impedance line surveillance. For applications which require maximum availability, two internal standby amplifiers are supported (requires the optional V2000-STBY module.)

## AUDIO INPUTS

INTEGRA supports ASL's range of paging and emergency microphones. Two of the twelve microphone inputs provide hardware bypass to ensure continued all-call Emergency microphone operation even if the INTEGRA router's DSP or CPU have failed. Up to 64 monitored recorded messages can be stored internally, with a total duration of up to 40 minutes.

## AUDIO PROCESSING

Powerful DSP based audio processing include input dynamics, individually adjustable digital output delay of up to 5 seconds, and 10 band parametric equalisation.

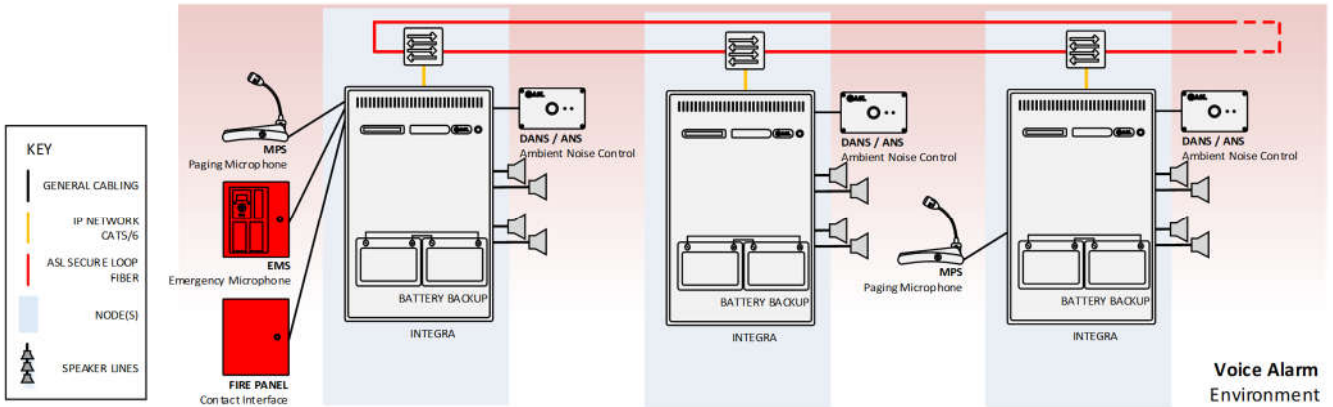
## CONTROL

The unit also includes 12 general purpose control inputs, 12 general purpose control outputs and two relay outputs. If required this can be expanded using the BMB01 unit.

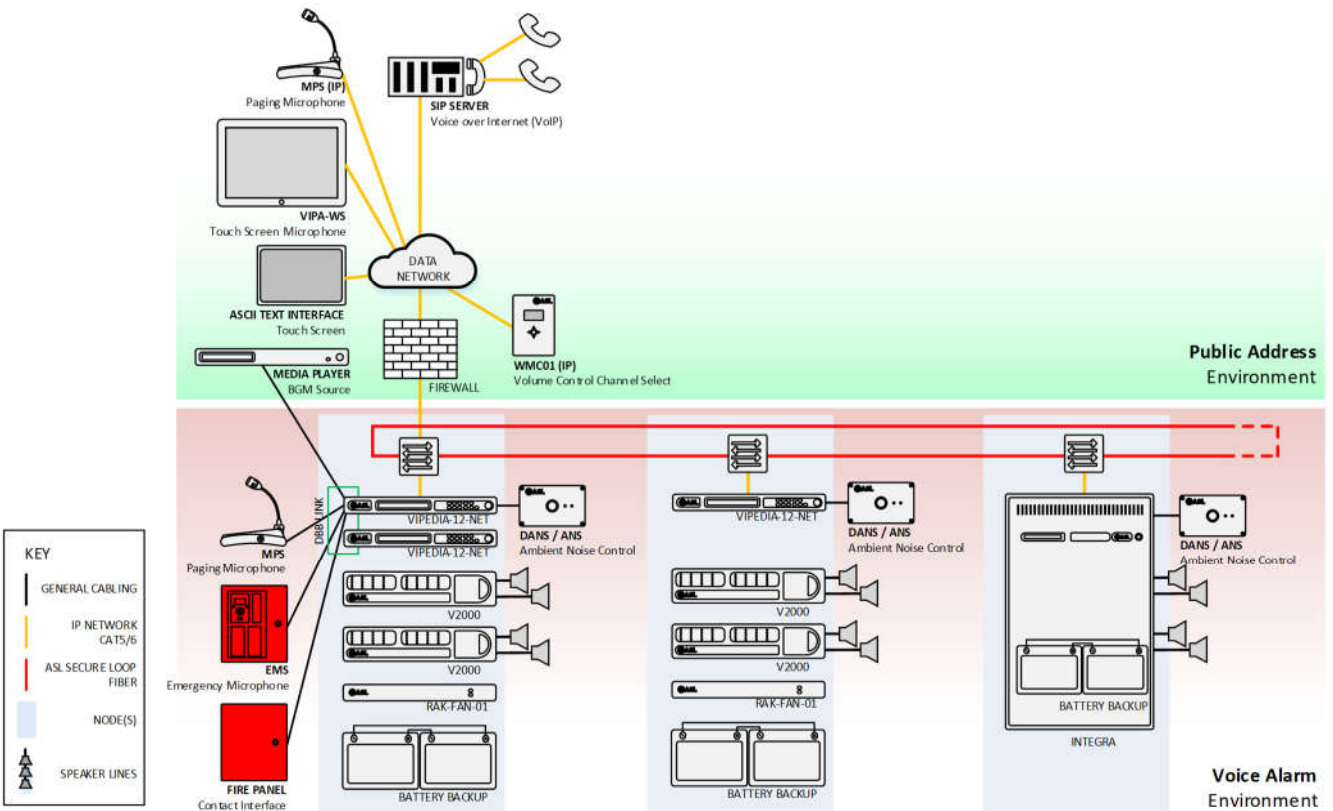
## SECURE LOOP IP NETWORK

For larger single site applications ASL's SecureLoop IP network provided by dedicated Layer 2 IP switches connects INTERGRA and VIPEDIA together, using standard Cat5/6 cable or multi-mode / single-mode fibre. This enables a fully redundant and supervised audio network to be easy rolled out across a site. Making INTEGRA ideal for installations requiring multiple nodes

## TYPICAL ARCHITECTURES (INTEGRA RANGE ONLY)



## TYPICAL ARCHITECTURES (INTEGRA AND VIPEDIA RANGE)



## SPECIFICATION

### Power

AC Supply Voltage .....	230V (+25% / -16%)
AC Supply Frequency .....	50 / 60 Hz
Quiescent Current (no amplifiers) .....	525mA
Quiescent Current (per amplifier) .....	23mA
Maximum Audio Output Power .....	2000W

### Battery Pack (Batteries not included)

Integrated Charger .....	Yes
Capacity (Ah) .....	75AH

### Audio - General

Digital Format .....	48kHz / 24-bit PCM
THD .....	<0.01% at 1 kHz
Crosstalk .....	>70 dB at 1 kHz
Residual Noise .....	<90 dBu (A)
Frequency Response .....	20 Hz to 20 kHz ±0.5 dB

### Audio - Inputs

Analogue Input Channels .....	12
Input Sensitivity .....	-60 / -40 / -20 / 0 dBu
Max Input Level .....	+20 dBu
Input Trim .....	-90 dB to +10 dB (1 dB steps)
Switchable HPF .....	20 to 500 Hz / Slope: 12 dB/oct
EQ .....	4 Band Parametric
Dynamics .....	Gate/Compressor/Limiter
Chime .....	Off / 1 note / 2 note / 3 note / Custom
Chime Level .....	-60 dB to +10 dB (1 dB steps)
Hardware bypass broadcast capability .....	2 inputs

### Dante®

Dante® Transmits .....	24 per device (Brooklyn II)
Dante® Receives .....	32 per System (Brooklyn II)
Dante® Ports .....	Primary

### Amplification

Type .....	Transformerless Class D
Active Amplifiers .....	0 / 3 / 5 / 7 / 10
Standby Amplifiers .....	1 / 2
Max power output per Amplifier .....	500W
Efficiency .....	>=85%
Frequency response .....	100Hz to 20kHz +/- 3dB
THD .....	< 0.5%
Output Noise .....	85dB below full output

### Audio Processing

Delay (per output) .....	1 ms to 5000 ms (1 ms steps)
EQ .....	10 Band Parametric
Dynamics .....	Limiter / Hard Clipper
Loudspeaker Monitoring .....	DC, Impedance, Loop Return

### Control Interfaces

Inputs .....	12
Outputs .....	12 (open-collector)
General Fault Relay (With N/O, COM, connections) .....	1
Voice Alarm Indicator Relay .....	1
BMB01 IO Expansion Interface .....	Supported

### Environmental

Operating .....	-10°C to +40°C
Storage .....	-20°C to +55°C
Humidity Range .....	0% to 93% non-condensing
Ingress Protection .....	IP32

### Mechanical

Finish .....	Low Smoke Zero Halogen (LSZH)
Dimensions (H x W x D) .....	980mm x 600mm x 220mm
Weight (no amplifiers) .....	40kg
Weight (per amplifier channel inc. surveillance card) ..	0.8kg

## PRODUCT PART CODES

INTEGRA-PRO-03 .....	Dante Enabled / 3 x 500W Amp Channels / 2000W Public Address / Voice Alarm System / Batteries not included
INTEGRA-PRO-05 .....	Dante Enabled / 5 x 500W Amp Channels / 2000W Public Address / Voice Alarm System / Batteries not included
INTEGRA-PRO-07 .....	Dante Enabled / 7 x 500W Amp Channels / 2000W Public Address / Voice Alarm System / Batteries not included
INTEGRA-PRO-10 .....	Dante Enabled / 10 x 500W Amp Channels / 2000W Public Address / Voice Alarm System / Batteries not included
INTEGRA-PRO-00 .....	Dante Enabled / 0 x 500W Amp Channels / 2000W Public Address / Voice Alarm System / Batteries not included

## COMPATIBLE HARDWARE

INTEGRA-03 .....	3 x 500W Amp Channels / 2000W Public Address / Voice Alarm System / Batteries not included
INTEGRA-05 .....	5 x 500W Amp Channels / 2000W Public Address / Voice Alarm System / Batteries not included
INTEGRA-07 .....	7 x 500W Amp Channels / 2000W Public Address / Voice Alarm System / Batteries not included
INTEGRA-10 .....	10 x 500W Amp Channels / 2000W Public Address / Voice Alarm System / Batteries not included
INTEGRA-00 .....	0 x 500W Amp Channels / 2000W Public Address / Voice Alarm System / Batteries not included
D150 or D500 .....	Amplifier Cards 150W or 500W
LSZDC .....	Amplifier Interface



This equipment is designed and manufactured to conform to the following EC standards:

EMC: EN55103-1/E1, EN55103-2/E5, EN50121-4, ENV50204

Safety: EN60065

### Manufacturer:

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Assessed to ISO 9001

LPCB Cert No: 1043QMS

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