



INTEGRA

- SELF-CONTAINED WALL MOUNT VOICE ALARM
- 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

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.

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 MPS and EMS paging 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.

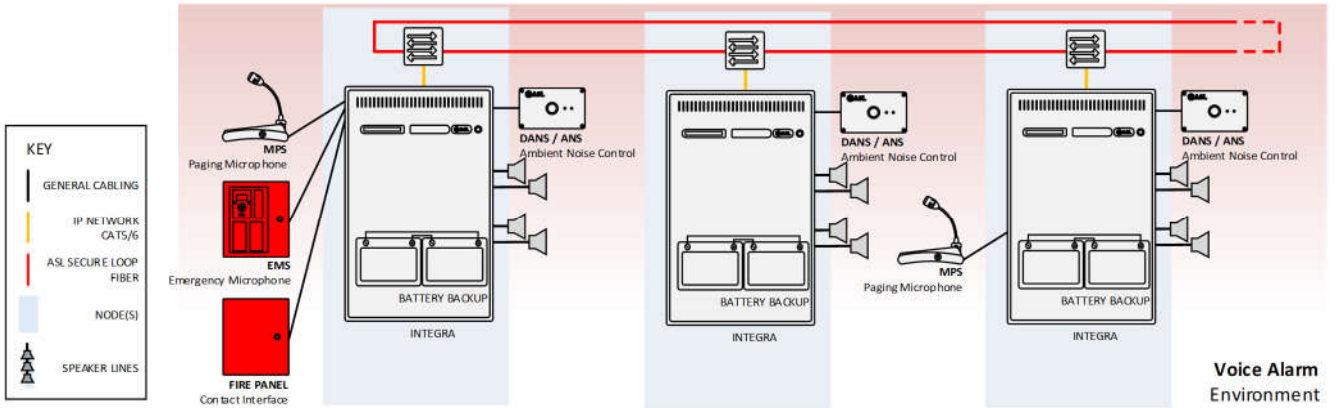
CONTROL

The unit also includes 12 general purpose control inputs, 12 general purpose control outputs and two relay outputs. Inputs are typically used to interface INTEGRA to the Fire Alarm System. Control capability can be expanded to more than 100 GPIO connections using the BMB01 unit if required.

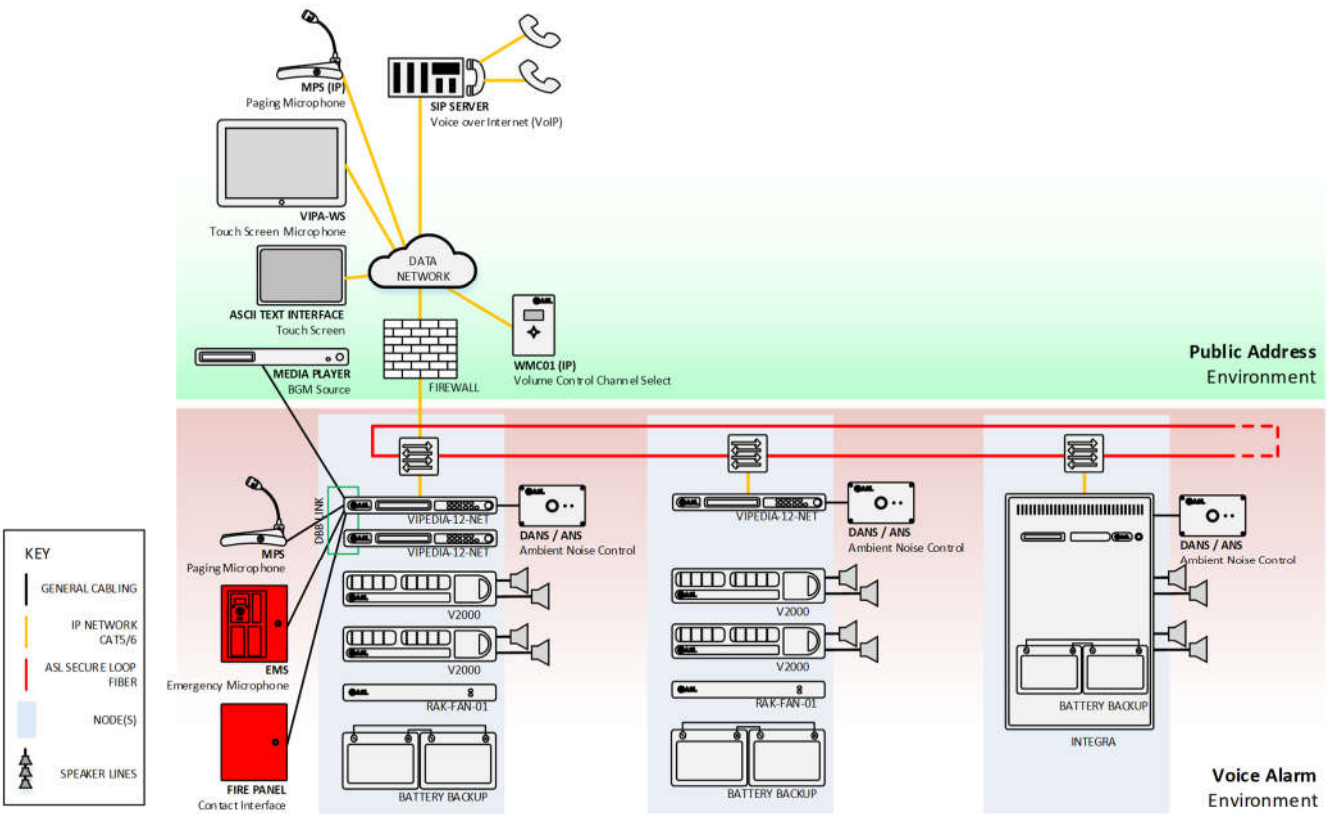
NETWORK SWITCH

In EN 54-16 and other Voice Alarm Architectures, each INTEGRA also requires a suitable Ethernet switch. ASL offer both single and multimode fibre options are available.

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

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-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

COMPATIBLE HARDWARE

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
D150 or D500	Amplifier Cards 150W or 500W
LSZDC	Amplifier Interface Cards



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

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Assessed to ISO 9001

LPCB Cert No: 1043QMS

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