

Architectural & Engineering Specifications

LAP G2 – Audio Network System

LAP G2 Audio Network Systems

The unit shall be an Ateis UK LAP G2 or equal and approved.

The unit shall comprise a steel rackmountable case with all connections on the rear panel.

The front panel shall have a data entry knob and LCD display, signal/clip/phantom LED indicators for each audio channel, plus LEDs indicating power, network, data, fault and evacuation status.

The unit hardware shall be available in various input, output and network interface configurations to ensure maximum value for the particular application, including AES/EBU digital audio input/output interfacing.

Up to sixteen balanced audio inputs or outputs shall be provided on each unit, and low-latency network interfacing shall be via copper, fibre or a combination.

The unit shall include a powerful, fully configurable DSP engine for all signal manipulation and control including an internal message store and replay scheduler.

The DSP engine shall allow the unit to be configured to act as practically any combination of high quality audio processors, and shall be capable of both networked and stand-alone operation following configuration.

When installed as a ring, the network shall be fully bidirectional/redundant and shall carry a minimum of forty-eight high quality audio channels with control data.

The unit shall be suitable for use in voice alarm, public address and professional audio applications and it shall be fully compatible with the IDA range of public address/voice alarm equipment.

It shall be possible to control the unit from remote locations or equipment, and the configuration software tool shall include options to produce custom screen layouts complete with real time controls and indicators.

The unit shall be powered from either AC and/or DC sources, and each input can be programmed to include phantom power.

The unit shall provide the following:

- 1U 19" Case
 - 483W x 44H x 320D mm
 - RAL7016
 - Forced air cooling
 - Side mounted internal fan
 - RS232 Port
 - 9 Way D connector
 - IDA Local system connection
 - Third party control
 - RS485 Port
 - Screw terminal Euro-Block plug
 - Remote controllers and paging microphones
 - TCP/IP Ethernet port
 - RJ45 with status LEDs
 - PC Control
 - Configuration

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Flexible network interface options

- 2 x RJ45
 - CAT5 Cables
 - 100m Maximum
- 2 x Dual ST-Fibre
 - Multimode
 - 2000m Maximum
- 1 x RJ45 1 x Dual ST-Fibre
 - Hybrid network
 - CAT5 & Multimode

- AC Power Supply
 - 100V - 240V
 - 50Hz - 60Hz
 - Rear panel power switch
 - IEC connector
- DC Power Supply
 - 21V - 28V
 - DC present status relay
 - Screw terminal Euro-Block plug
- Power Consumption
 - 40VA operating
 - 10VA standby
- Flexible Analogue Audio Input/Output Options
 - 16 Audio outputs
 - 4 Audio inputs plus 12 audio outputs
 - 8 Audio inputs plus 8 audio outputs
 - 12 Audio inputs plus 4 audio outputs
 - 16 Audio inputs
- Bi-Directional Network Operation
 - Automatic address negotiation
 - 2 - 32 LAP G2 on network
 - 48 Simultaneous audio channels
 - <1ms Latency
 - Data transmission
 - Fault tolerant
 - Faulty segment bypass
 - Fault indication

- LCD Display
 - 2 Line
 - 16 Character
 - Data entry knob
 - Push to select operation
- LED Indication
 - Power (green)
 - Fault (amber)
 - Evacuation (red)
 - Standby (green)
 - Data (green)
 - Ethernet (green)
 - Network (green)
- Analogue Audio Inputs
 - 10K Ohm balanced
 - Programmable sensitivity
 - 0dB, -24dB, -55dB
 - +20dBu maximum input level
 - 18Hz - 22kHz bandwidth
 - Programmable +48V DC phantom power per input
 - Screw terminal Euro-Block plug
 - LED Indication
 - Signal present (green)
 - Signal clip warning (amber)
 - Phantom power active (green)
- Analogue Audio Outputs
 - 50 Ohm balanced
 - 18Hz - 22kHz bandwidth
 - +20dBu maximum output level
 - <0.02% THD at +10dBu 20Hz - 20kHz
 - 110dB S/N at +20dBu unity gain 22kHz bandwidth
 - 105dB S/N at +20dBu +55dB gain 22kHz bandwidth
 - Screw terminal Euro-Block plug
 - LED Indication
 - Signal present (green)
 - Signal clip warning (amber)

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- 16 Programmable Control Inputs
 - 0V - 5V analogue
 - Programmable max/min values
 - Programmable pos/neg variation
 - Programmable lin/log/anti-log response
 - TTL level
 - Normal or binary code mode
 - Screw terminal Euro-Block plug
- 8 Programmable Control Outputs
 - TTL level
 - Screw terminal Euro-Block plug
- Programmable DSP Engine
 - 24 Bit A/D conversion
 - 24 Bit D/A conversion
 - 48kHz or 96kHz sample rate
 - 32 Bit floating point processing
 - 400Mhz clock rate
 - 2.4GFLOPS peak
- Third Party Control
 - VITY
 - Crestron
 - AMX
 - Open interface (control table all names all parameters)
- Programmable PC Control
 - Custom GUI generation
 - Graphics import (.jpeg, .bmp, .ico, .emf, .wmf)
 - Graphics manipulation (resize, align, pack, space, order)
 - 40 Distinct user groups
 - Password user access
- Message Replay
 - WAV format
 - 100Mbyte storage
- 48kHz - 96kHz sample rate
- 8bit - 16 bit resolution
- 9 minutes - 36 minutes capacity
- Scheduler
 - 128 Separate schedules
 - 100 Events per schedule
 - Message replay
 - Preset selection
 - Parameter setting
 - TTL control outputs
- 10 Design Presets
 - Separate machine configurations
 - Element and parameter control
 - Preset selection from PC, control inputs and third party
- 20 Parameter Presets
 - Single machine configuration
 - Parameter control
 - Preset selection from PC, control inputs and third party
- PC Configuration Software
 - Drag and drop
 - Create visual representation of processing elements
 - Connect with virtual wires
 - Cut, copy and paste
 - Contextual menu options
 - Resizable animated knobs, sliders and buttons
 - Direct numerical number entry option
 - Graphical curve parameter adjustment option
- Available Processing Elements
 - Input units
 - Analogue, Network
 - Output units
 - Analogue, Network
 - Mixers
 - Matrix 4x4, 8x8, 16x16

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Standard 4x4, 8x8, 16x16	Noise Generator
Auto 4x1, 8x1, 16x1	White, pink, tone
Dynamic Processors	Signal Level Meter
Limiter	Peak, rms
Compressor	1, 4, 8, 16 channel
Expander	Level Control
Compressor-Limiter	1x1, 4x4, 8x8, 16x16
Equalisers	Automatic Noise Sensing/Control (ANS)
Parametric 2, 4, 6, 8, 10, 16 band	Audio Bus
Graphic 1, 2/3, 1/3 octave	1x1, 4x4, 8x8, 16x16
Basic Delays	Message Storage
1, 4, 8 channel	PPM Touch
0-5ms, 0-50ms, 0-100ms, 0-200ms, 0-500ms, 0- 1000ms, 0-2000ms	<ul style="list-style-type: none"> • Optional Wired URC Remote Control Display, rotary control, twin buttons Programmable to adjust any parameter/preset RS485 connection • Optional Wired PPM Paging Microphone Up to 64 buttons with keypad extensions Programmable pre-and post call chime Omni-directional gooseneck microphone • Optional Wired PPM-SP Paging Microphone Up to 64 buttons with keypad extensions Programmable pre-and post call chime Cardioid gooseneck microphone Call store and forward for busy zones 2 minute audio capacity Enhanced audio quality • Optional Wired RAC Remote Access Control Rotary volume control 5 or 8 channel source selector
Advanced Delays	
1, 4, 8 channel	
0-5ms, 0-50ms, 0-100ms, 0-200ms, 0-500ms, 0-	
Gates	
Mono, mono-sidechain, stereo	
AGC	
Ducker	
Filters	
High/Low pass, band pass, band stop, notch, shelving	
Cross Overs	
2 Way, 3 way, 4 way	
Feedback Suppression	
Speech, music low, music medium, music high 4, 8, 12, 16 band notch	
Paging Control	
TTL, PPM microphone consoles	
Source/Programme Selector	
4, 5, 6, 7, 8, 16, 32 way	

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IMPORTANT

Specifications are subject to
change without prior notice.
More information can be found
at the website: www.ateis.co.uk

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