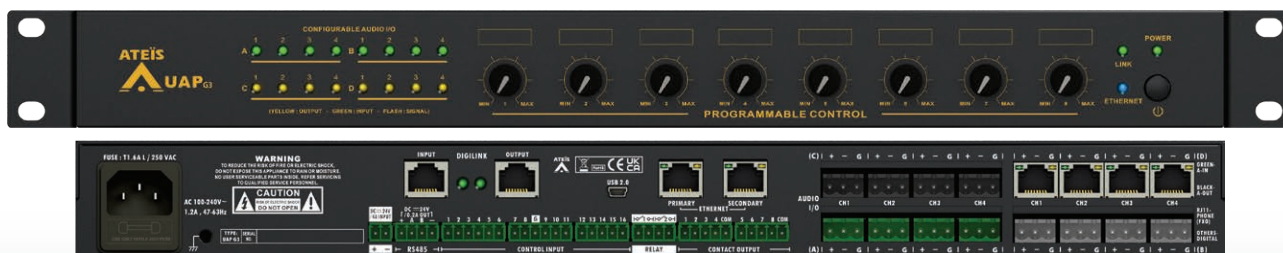# UAP G3/UAP G3H

Universal Audio Processor G3, Basic Ver./High Performance Ver.

The UAP G3/UAP G3H is a cascadable DSP audio processor which comes with 4 modular card slots for fully flexible I/O configuration. The options of 4 card slots include analog audio cards, digital audio I/O cards and specialty cards such as VoIP card, AEC card, analog telephone card, OCTOLINK card and AES-EBU card. The I/O combination from 4Ix4O, 4Ix8O, 8Ix4O, 8Ix8O, 4Ix12O, 12Ix4O, 16I or 16O. Using OCTOLINK cards can up to 32Ix32O audio I/O. Up to 12 UAP G3/UAP G3H processors can be cascaded via Digi-Link bus. The UAP G3/UAP G3H can be linked via CAT5/6/7 cable with metal shielded RJ45 connector (max. length 33 ft/10m between units).
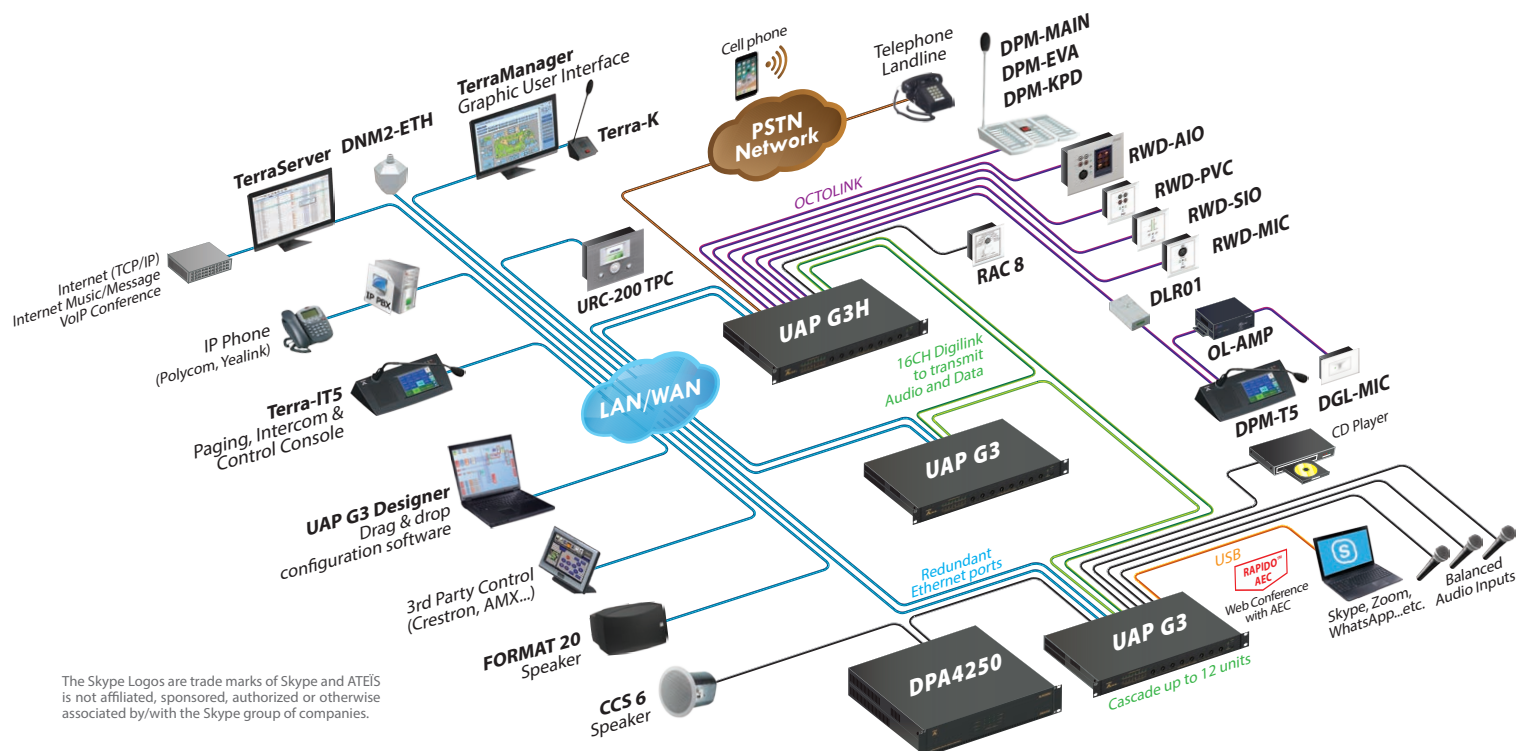
Each OCTOLINK port provides 2 audio channel inputs and 2 audio channel outputs which simultaneously transmit bidirectional data in digital format, providing an easy connection to remotes such as paging console, wall mount controller and ceiling mount microphone. The connection between the UAP G3/UAP G3H and remote device is using STP CAT5/6/7 cable with metal shielded RJ45 connector with a max. communication distance of 820 ft/250m.

As our state of the art DSP processor, the UAP G3/UAP G3H also incorporates full drag n' drop DSP component libraries such as AGC, AEC, Ducker, various kinds of Mixer, Delay, A.N.G (Auto Noise Gain), ANR (Ambient Noise Reduction), PEQ, Feedback, Hi/Lo Pass, message player, event scheduler for element adjustment, preset changes and event control, dynamic zone paging, In/Out audio streaming, VoIP/SIP for teleconferencing, level control, telephone transmit/receive, audio recorder, etc. making the entire system flexible and easy to program and integrate. The UAP G3/UAP G3H features 8 programmable knobs, each knob can be programmed in custom DSP parameter for intuitive control without PC or any other software.

With ATEÏS's optional AEC-Card (Acoustic Echo Cancellation) using our ultra-fast patent RAPIDO™ AEC algorithm, the UAP G3/UAP G3H is capable to use VoIP and SIP functionality for distance and web-conferencing applications. The UAP G3/UAP G3H can be integrated with various remote inputs, outputs or controllers for Home & Office Automation. Logic I/O, RS485 and Ethernet is also available for 3rd party control.

- UAP G3H: All DSP components
- UAP G3: All DSP components except AEC

APPLICATION EXAMPLE

The Skype Logos are trade marks of Skype and ATEÏS is not affiliated, sponsored, authorized or otherwise associated by/with the Skype group of companies.

www.ateis.com

UAP G3/UAP G3H

Universal Audio Processor G3, Basic Ver./High Performance Ver.

FEATURES

- Up to 12 UAP G3/UAP G3H units can be cascaded via Digi-Link bus for I/O expansion.
- 16 audio channels and data over Digi-Link bus.
- Drag-n-drop DSP functions such as AGC, AEC, PEQ or mixers, Feedback Suppressor, etc.
- Modular analog/digital audio input/output cards for up to 32I or 32O per unit.
- Internal message storage up to 60 minutes in WAV format (16k, 16bits) or 240 minutes in G.722 format.
- Redundant Ethernet ports with auto detection to switch to secondary network in case of primary failure or the cable is disconnected.
- Include a mini-USB audio port to be connected to a computer for audio playback or distance conferencing via Skype, Zoom, WeChat or WhatsApp.
- DPM-T5 supports dynamic zone paging, intercom, stack paging, message playing, message event triggering, audio routing, volume control, etc.

PAGING CONSOLES & ACCESSORIES

DPM-MAIN
Digital Redundant Loop Paging Microphone-Main

DPM-EVA
EVAC Unit with Speaker and Extra Buttons

DPM-KPD
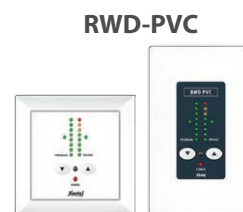Additional 8+1 Microphone Keypad

DPM-T5
5" TouchPanel
Paging Mic Console

RWD-MIC

MIC/Line In Device

RWD-SIO

Stereo In/Out Device

RWD-PVC

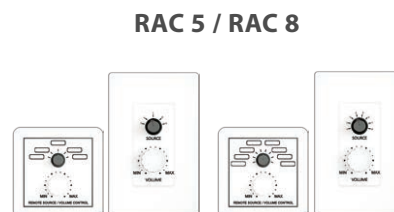Volume Control &
Source Selector
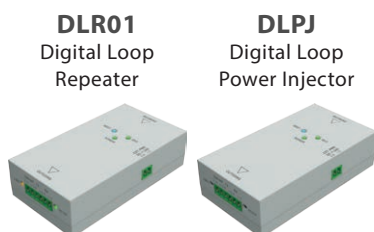
RWD-AIO

Audio I/O & Touch
Screen Controller

URC-200 TPC

Wall-mount with
2'' TFT LCD and IR receiver (TCP/IP)

RAC 5 / RAC 8

5/8 Steps Level and Source Selector
Available for EU & US type

DLR01
Digital Loop
Repeater

DLPJ
Digital Loop
Power Injector

DGL-MIC
Flush/Ceiling Mount
Microphone

DNM2-ETH
Digital Ambient Noise
Sensing Mic

* The DLR01 is not including with power adapter,
please order the power adapter if necessary.

Flush Mount Type

Pendant Type

TECHNICAL SPECIFICATIONS

ELECTRICAL

- AC power input: 100 ~ 240 VAC, 47 ~ 63 Hz
- DC power input: 24 VDC
- Power consumption: 42W (max.)

AUDIO CHARACTERISTICS (GENERAL)

- A/D-D/A bit resolution: 24 bit
- Sampling rate: 48kHz
- Frequency response: 20 Hz ~ 20 kHz (±3 dB) @ 0 dBu
- EIN: <-125 dBrA @ 60 dB gain
- THD+N: < 0.006 % @ 4 dBu (1 kHz) in, 0 dB gain

AUDIO CHARACTERISTICS (MIC IN & AUDIO I/O)

- Phantom power: 48 VDC, 15 mA
  * Using Phantom power, the power of the entire UAP G3/UAP G3H machine can be supplied to up to 12 Channels
- Input gain range: 0 ~ 66 dB (6 dB steps)
- Maximum input level: 18 dBu
- Input impedance (balanced): 8k ohm
- EIN: <-125 dBrA @ 60 dB gain
- CMRR: > 85 dBu (1 kHz) @ 36 dB gain
- Crosstalk: > 70 dB @ 42 dBu (10 kHz) in, -36 dB gain

AUDIO CHARACTERISTICS (LINE IN & LINE OUT)

- Maximum input level: 18 dBu
- Maximum output level: 18 dBu
- Input impedance: 8k ohm
- Output impedance: 32 ohm
- EIN: <-86 dBrA @ 0 dB gain
- CMRR: > 75 dBu (1 kHz) @ 0 dB gain
- Crosstalk: > 70 dB @ 6 dBu (10 kHz) in, 0 dB gain

NETWORK

- Max. UAP G3/UAP G3H units via Digi-Link: 12
- Max. distance between UAP G3/UAP G3H units: 10m/33 ft (STP CAT5/6/7 cable)
- Max. remote units via OCTOLINK: 4 remote units per OCTOLINK card and connect 1 DGL-MIC mic at the end of bus
- Max. number of remotes/per processor: 32
- Max. communication distance between remote units: 250m/820ft (STP CAT5/6/7 cable, metal shielded RJ45 connector)
  * The distance of cable length will directly affect the quantity and power requirement of remote unit.
  1. The longer the cable is, the less power the UAP G3/UAP G3H can supply to the remote units.
  2. The more the remote units has cascaded in daisy-chain/redundant loop, the less power the UAP G3/UAP G3H can supply to the remote units.
  For example, if the cable length between the UAP G3/UAP G3H and DPM-MAIN is within 250m, the DPM-MAIN can be powered by UAP G3/UAP G3H. If the cable length is beyond 250m, please connect the DLR01 digital loop repeater and 24VDC power adapter, ensuring the control signal and power supply of DPM-MAIN units are enough.

FRONT PANEL

- 4 configurable audio I/O card slots LEDs
- 8 programmable knobs
- Digilink LED, Power LED, Ethernet LED
- Standby mode button (on/off)

REAR PANEL

- AC power socket with fuse
- Digi-Link port (STP CAT5/6/7 for UAP G3/UAP G3H processors link)
- 4 configurable card slots
  - UAP G3: analog/digital audio I/O (AEC), OCTOLINK
  - UAP G3H: analog/digital audio I/O (AEC), OCTOLINK, AES-EBU, VoIP, analog telephone card
- Ethernet ports for network redundancy (STP CAT5/6 cable, RJ45 plug)
- 24VDC power input (4A)
- 24VDC power output (0.2A)
- 16CH control inputs
- 8CH contact outputs
- 2 relay contacts
- RS485 for 3rd party control
- Mini-USB (2.0 format) interface for remote conferencing

MECHANICAL

- Dimension (W x H x D): 431 x 49 x 204 mm
- Weight: 2.5 kg
- Color: RAL 7046

ENVIRONMENTAL

- Operating temperature: +23 ºF ~ +131 ºF (-5 ºC ~ +55 ºC)
- Storage temperature: -40 °F ~ +158 °F (-40 °C ~ +70 °C)
- Relative humidity: 20% to 95% noncondensing
- Heat dissipation: 123 BTU/hr

CERTIFICATIONS

- CE marked, RoHS compliant (pending)

Ordering Information

Model No.		Step 1	Step 2	Step 3	Step 4	Description of Model	Card Name
UAPG3		Slot A	Slot B	Slot C	Slot D	Universal Audio Processor G3,Basic Ver.	
UAPG3H						Universal Audio Processor G3,High Performance Ver.	
Analog Audio I/O Cards							
UAPG3	UAPG3H						
✔	✔	M	M	M	M	4CH Mic/Line Audio Input Card	CDH-MI
✔	✔	L	L	L	L	4CH Line Audio Input Card	CDH-LI
✔	✔	O	O	O	O	4CH Line Audio Output Card	CDH-LO
✔	✔	H	H	H	H	2CH Mic/Line Input & 2CH Line Audio Output Card	CDH-MIO
✔	✔	A	A	A	A	4CH Mic/Line Input card with AEC	CDH-MA
Digital Audio I/O Cards & Specialty Cards							
—	✔	E	E	E	E	Stereo AES-EBU I/O Card, 4 Port	CDH-AES
✔	✔	K	K	K	K	OCTOLINK Card	CDH-OL
—	✔	V	V	V	V	4CH Duplex VoIP Card	CDH-VP
—	✔	F	F	F	F	Analog TEL Card with 4 Line	CDH-T4L
—	✔	P	P	P	P	Analog TEL Card with 2 Line and 2 Set	CDH-T2L2S
✔	✔					None of the card is installed	—

* Note: All the Audio Cards do not ship with 3 PIN EURO Terminal Blocks for I/O connection. Users can order the connector depending on separate needs.

The model no. needs to follow the order of card ID listed below:
• M → L → O → H → A → E → K → V → F → P

Example 1
• **UAPG3-MLH**: (O) – correct order
• **UAPG3-MHL**: (X) – incorrect order

Example 2
• **UAPG3H-OOK**: (O) – correct order
• **UAPG3H-OOL**: (X) – incorrect order

Model number and description

Example 1
UAPG3-ML
• UAPG3: Universal Audio Processor G3,Basic Ver.
• M: 4 CH Mic/Line Audio Input Card on Slot A
• L: 4 CH Line Audio Input Card on Slot B

Example 2
UAPG3H-MLOK
• UAPG3H: Universal Audio Processor G3,High Performance Ver.
• M: 4 CH Mic/Line Audio Input Card on Slot A
• L: 4 CH Line Audio Input Card on Slot B
• O: 4 CH Line Audio Output Card on Slot C
• K: OCTOLINK Card on Slot D