AP212

2 x 120W Power Amplifier with DSP

ATEN AP212 is a dual-channel DSP-equipped amplifier that delivers 120 W per channel in a compact enclosure. The support for balanced / unbalanced line level inputs and the capability of driving 4 ohm low impedance or 70/100V line (in Bridge mode) loudspeaker systems have made AP212 suit a wide range of public address applications. Configurable through an intuitive WebGUI, the built-in DSP allows Speaker EQ, 5-band EQ, delay, limiter, and up to 20 presets for precise tuning and extensive audio system protection purposes. Ground lift is deployed to eliminate unwanted hum noises from power circuit. Immersive sound experience is delivered with no compromise on power efficiency thanks to the amplifier's Class-D design and ENERGY STAR qualification, conserving energy while lowering operational costs. Customizable Auto Standby mode enables the AP212 to automatically switch to "sleep" when the signal level comes lower than -40 / -50 dBu for 10 / 15 / 25 minutes.

Speaking of the system protection circuit, the AP212, along with the speakers connected to it, are prevented from damages led by shorted outputs, over / under-voltage, high frequency overload, and overtemperature. Plus, the amplifier will be muted when the heat sink temperature exceeds the limit. The fanless design avoids fan noise and prevents dust from building up inside the chassis.

Engineered to deliver the ultimate flexibility, the AP212 features an expansion slot for plugging in AP901 2-CH Dante Expansion Card to make the sound system compatible with Dante network or AP902 2-CH Mic/Line Pre-AMP Expansion Card to receive two channels of mic / line input signals. The amplifier can also be integrated with VK Control System via RS-232 and Ethernet connection for comprehensive control even from a distance. Mounting hardware is available for rack or surface-mounting depending on the installation needs. With a rich set of features, the AP212 assures reliable amplification with professional audio quality and high power efficiency for any enterprise-grade applications that require high quality sound reinforcement and distribution.
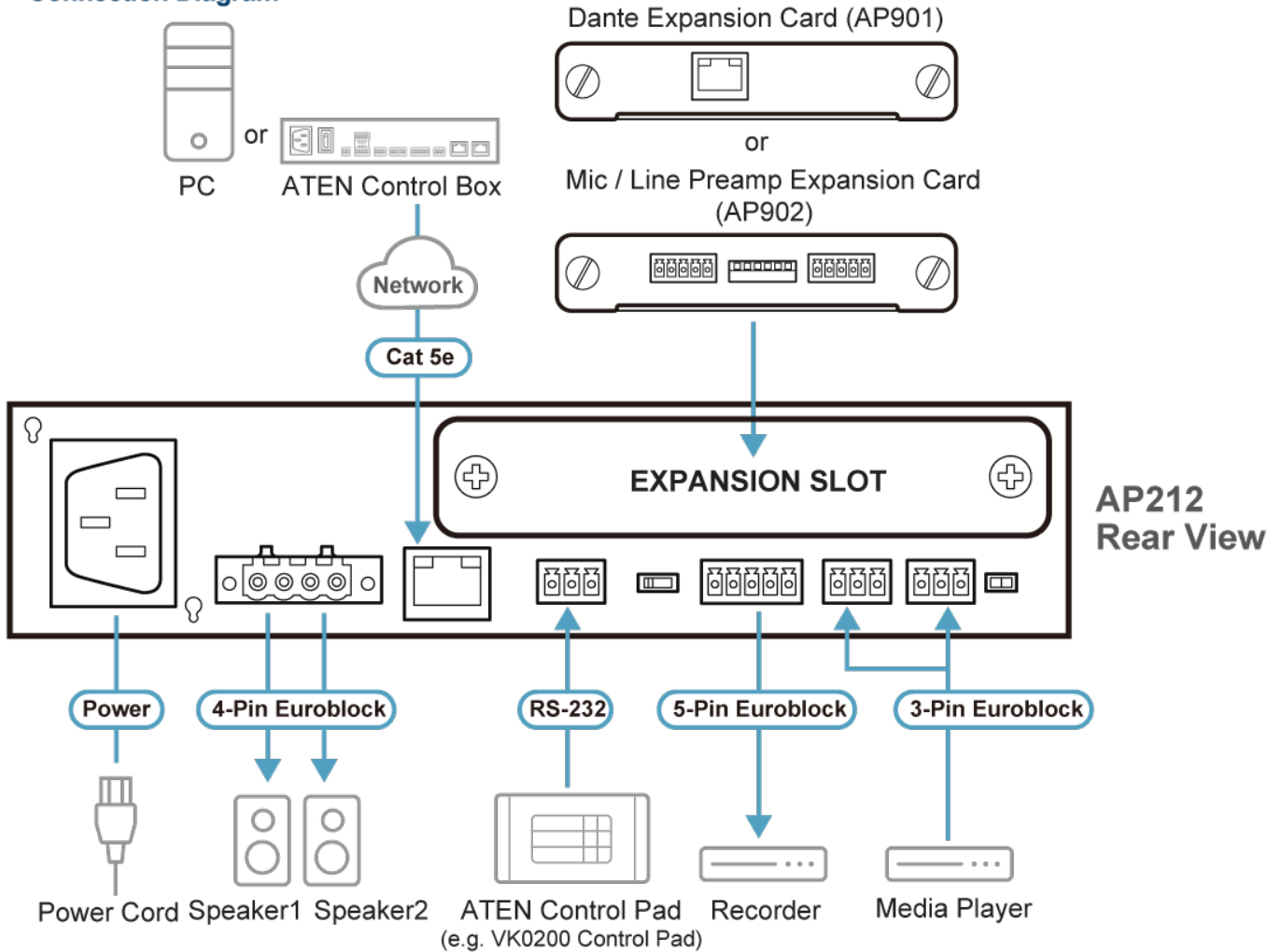
Features

- A dual-channel DSP-equipped amplifier that delivers 120W per channel in a compact enclosure
- Supports balanced / unbalanced line level inputs and drives 4 ohm low impedance or 70/100V line (in Bridge mode) loudspeaker systems
- Built-in WebGUI-configurable DSP allows speaker EQ, 5-band EQ, delay, limiter, and up to 20 presets for precise tuning and system protection
- Ground lift deployed to eliminate unwanted noises from power circuit.
- Class-D design with ENERGY STAR qualification for high power efficiency
- Customizable Auto Standby mode – Amplifier automatically switches to "sleep" when the signal level comes lower than -40 / -50 dBu for 10 / 15 / 25 minutes
- Integrated protection circuit – Protects the system from damages caused by Amp shortcut, Amp output over/under voltage, high frequency overload, and overtemperature
- Amplifier will be muted when the heat sink temperature exceeds the limit
- Fanless design – Avoids fan noise and prevents dust from building up
- Expansion slot for add-on expansion card – Install AP901 2-CH Dante Expansion Card to make the sound system compatible with Dante network or AP902 2-CH Mic/Line Pre-AMP Expansion Card to receive two channels of mic / line input signals
- Supports VK Control System via RS-232 and Ethernet connection
- Supports rack or surface-mounting
- Firmware upgradable

Specification

System Specification	
Rated Power	120Wrms / 240Wpeak per Channel @4Ω 240Wrms / 480Wpeak @70/100V Under Bridge Mode
Distortion	THD+N: <0.1%, 1kHz, 3dB before clipping
Frequency Response	50~20kHz, +/-3dB @4Ω, 1W
Sensitivity	Balanced: +4dBu Unbalanced: -10dBV (0dBu=0.775Vrms, 0dBV=1Vrms)
Amplifier Type	Class D
Audio Inputs	
Interfaces	2 x 3-pin 3.5mm Euroblock (Bal/Unbal Line In)
Impedance	Balanced: 20kΩ / Unbalanced: 10kΩ
Detect Threshold	-50dBu
Audio Outputs	
Interfaces	Line Output: 1 x 5-pin 3.5mm Euroblock Speaker Output: 1 x 4-pin 5.08mm Euroblock
Impedance	Lo-Z: 4Ω / Hi-Z: 70V (20Ω), 100V (40Ω) Line Output: 600Ω
Audio Effects	Built-In DSP
Protection	Output Shortcut AMP Output over/under voltage High Frequency Overload Thermal Protect
Communication	
RS-232	Connector: 3-pin, 3.5mm, Terminal Block Baud rate and protocol: Baud Rate: 19200, Data Bits: 8, Stop Bits:1, Parity: No, Flow Control: No
Compliance	
Certification	FCC, CE, UKCA
Power	
Maximum Input Power Rating	100-240V~, 50/60Hz, 4A with PFC
Power Consumption	AC110V:41.9W:196BTU AC220V:39.6W:186BTU
Environmental	
Operating Temperature	0~50℃
Humidity	0-80% RH, Non-Condensing
Storage Temperature	-20~60℃
Physical Properties	
Weight	2.15 kg (4.74 lb)
Housing	Metal
Dimensions (L x W x H)	20.00 x 32.30 x 4.40 cm (7.87 x 12.72 x 1.73 in.)
Note	For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.

Diagram

▶ Connection Diagram

PC **or** ATEN Control Box

Dante Expansion Card (AP901)

or

Mic / Line Preamp Expansion Card (AP902)

Network

Cat 5e

EXPANSION SLOT

AP212
Rear View

Power

4-Pin Euroblock

RS-232

5-Pin Euroblock

3-Pin Euroblock

Power Cord

Speaker1 Speaker2

ATEN Control Pad
(e.g. VK0200 Control Pad)

Recorder

Media Player