

## AP106

60W Mono Hi-Z Power Amplifier



The AP106 is a 60W power amplifier with Hi-Z outputs capable of driving 70 V / 100 V audio systems. The support for balanced / unbalanced line level inputs enables superior sound quality and installation flexibility. Apart from the overall volume adjustment function, the built-in 2-band shelf EQ provides  $\pm 6$  dB boost / suppression of treble and bass control, offering subtle tone shaping and extra control versatility. As a result of the extra headroom this amplifier delivers, accommodating transient audio peaks and preventing distortion is never a problem to the AP106.

With Class D efficiency, the amplifier comes in a smaller, lighter enclosure, yet runs cooler comparing with other classes of amplifiers with the same amount of power. The fanless design helps eliminate operation shutdown brought by fan malfunction and ensures the amplifier not to be vulnerable to outside elements. Constructed in a compact, sealed casing, the AP106 approves of hidden placement, for instance, behind the TV, or even in the dusty environments, such as above the ceiling.

Speaking of the system protection circuit, the AP106, along with the speakers connected to it, is prevented from damages led by shorted outputs, over / under-voltage, high frequency overload, and overtemperature. Built to be energy-efficient, the amplifier enters Power Saving Mode when no audio input is detectable in 30 minutes and turns back on when a source is detected. Additional features include the front panel LEDs that indicate the device status, plus the bi-directional RS-232 serial port that allows for firmware upgrade and easy integration with ATEN's Control System, which acts as a centralized platform where hardware devices are converged to be monitored and controlled via an intuitive GUI. The AP106 is perfect for upgrading commercial or residential Pro AV systems where maintaining ultra-low distortion while exhibiting exceptional sound quality is required.

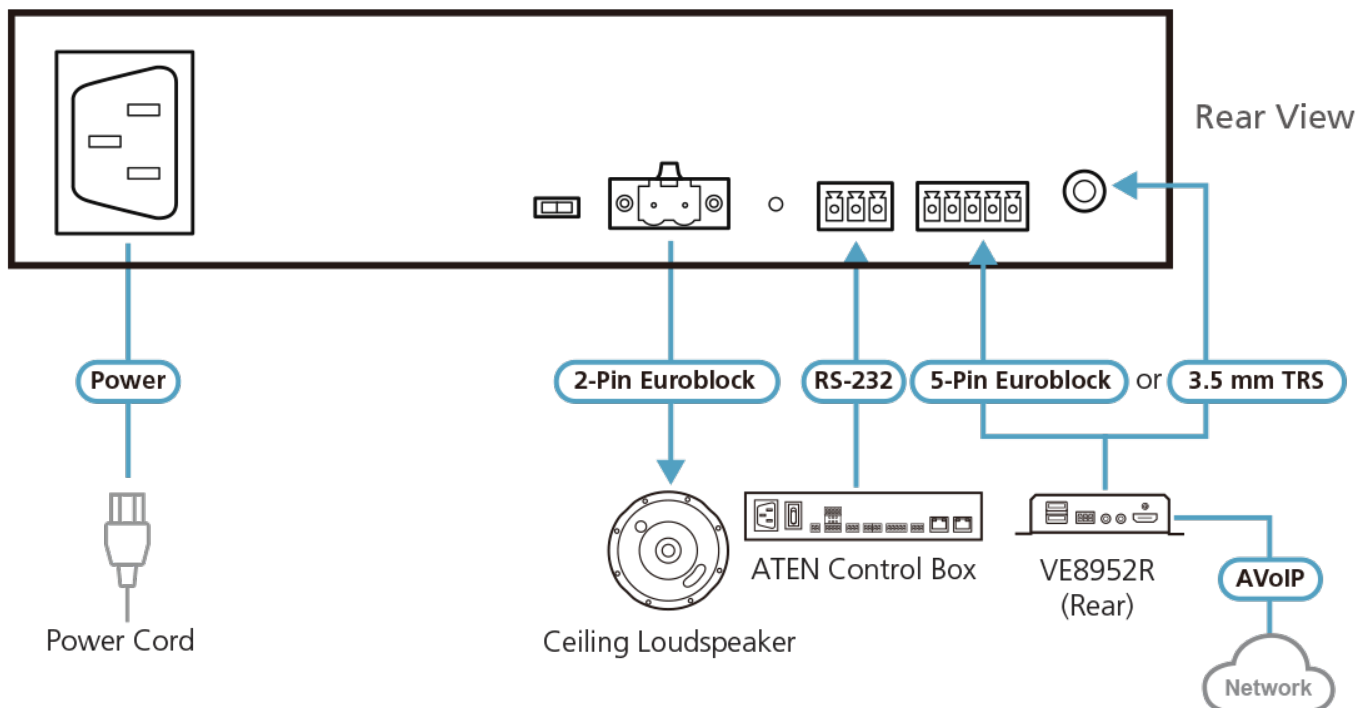
### Features

- A high-output power amp that delivers 60 W of power to 70 V or 100 V distributed audio systems
- Built-in 2-band shelf EQ provides  $\pm 6$  dB boost / suppression of treble and bass control
- Delivers extra headroom to accommodate transient audio peaks and prevent distortion
- Fanless design eliminates operation shutdown caused by fan malfunction and ensures the amplifier not to be vulnerable to outside elements
- Compact, sealed casing approves of hidden placement even in the dusty environments
- Provides a wide range of professional audio equipment with easy, secure connectivity:
  - Supports balanced and unbalanced line inputs on an Euroblock connector and a TRS jack (unbalanced input only)
  - Output for high-Z via an Euroblock connector
  - AC power on IEC receptacle for overseas operation
- Power Saving Mode – the AP106 shuts down when no audio input higher than -50 dBu is detectable in 30 minutes and turns back on when a source reaches -30 dBu is detected
- Integrated protection – Amp shortcut, Amp output over/under-voltage, high frequency overload, and overtemperature protection
- Bi-directional RS-232 serial port allows for firmware upgrade and easy integration with ATEN's Control System
- Class D high efficiency and energy saving construction
- Perfect for upgrading commercial or residential Pro AV systems where maintaining ultra-low distortion while exhibiting exceptional sound quality is required

## Specifications

|                        |                                                                                                                                                 |
|------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| System Specification   |                                                                                                                                                 |
| Rated Power            | 60Wrms/ 120Wpeak                                                                                                                                |
| Distortion             | THD+N: <0.1%, 1kHz, 3dB before clipping                                                                                                         |
| Frequency Response     | 80~20kHz, 0/-3dB @70V, 1W                                                                                                                       |
| Sensitivity            | Balanced: +4dBu<br>Unbalanced: -10dBV<br>(0dBu=0.775Vrms, 0dBV=1Vrms)                                                                           |
| Amplifier Type         | Class D                                                                                                                                         |
| HPF                    | 80Hz, -12dB/Oct                                                                                                                                 |
| Audio Inputs           |                                                                                                                                                 |
| Interfaces             | 1 x 5-pin 3.5mm Euroblock (Bal/Unbal Line In)<br>1 x 3.5mm TRS Unbalanced Phone Jack (Priority)                                                 |
| Impedance              | Balanced: 20kΩ<br>Unbalanced: 10kΩ                                                                                                              |
| Detect Threshold       | -50dBu                                                                                                                                          |
| Audio Outputs          |                                                                                                                                                 |
| Interfaces             | 1 x 2-pin 5.08mm Euroblock                                                                                                                      |
| Impedance              | Minimum Load<br>70V: 80Ω<br>100V: 160Ω                                                                                                          |
| Audio Effects          | 2-band Shelf EQ, +/-6dB                                                                                                                         |
| Protection             | Output Shortcut<br>AMP Output over/under voltage<br>High Frequency Overload<br>Thermal Protect                                                  |
| Communication          |                                                                                                                                                 |
| RS-232                 | Connector: 3-pin, 3.5mm, Terminal Block<br>Baud rate and protocol:<br>Baud Rate: 19200, Data Bits: 8, Stop Bits:1, Parity: No, Flow Control: No |
| Power                  |                                                                                                                                                 |
| Power Consumption      | 100-240V~, 50/60Hz, 1A                                                                                                                          |
| Compliance             |                                                                                                                                                 |
| Certification          | FCC, CE, UKCA                                                                                                                                   |
| Environmental          |                                                                                                                                                 |
| Operating Temperature  | 0~40°C                                                                                                                                          |
| Humidity               | 0-80% RH, Non-Condensing                                                                                                                        |
| Storage Temperature    | -20~60°C                                                                                                                                        |
| Physical Properties    |                                                                                                                                                 |
| Weight                 | 1.23 kg ( 2.71 lb )                                                                                                                             |
| Housing                | Metal                                                                                                                                           |
| Dimensions (L x W x H) | 20.00 x 15.72 x 4.40 cm<br>(7.87 x 6.19 x 1.73 in.)                                                                                             |
| Note                   | Rack/surface mount kits are sold separately.                                                                                                    |
| Note                   | For some of rack mount products, please note that the standard physical dimensions of WxDxH are expressed using a LxWxH format.                 |

Diagram


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