



# AMP523

Web-based mini stereo amplifier 2 x 15W

## Highlights:

---

- Compatible with AUDAC Touch™
- RS232 & TCP/IP control port
- 4 unbalanced stereo line inputs
- 1 x Microphone input
- Priority audio inputs with phantom power
- Lightweight class-D amplifier
- S-box™ modular multifunctional enclosure



The AMP523 is a mini stereo amplifier with an integrated web-based control unit featuring four stereo line inputs and one balanced microphone input with phantom power. It has an output power rating of 2 x 15 Watt. The simple and compact but versatile functionalities make it perfectly suited for small speaker systems requiring compact and economical audio solutions which are comprehensive and easily controllable. Some typical applications are classrooms where the audio system will be used in combination with a smartboard, offices and meeting rooms where the music should switch automatically from background music to speech or playback when the presentation starts, .... and many other similar applications.

The compact size and very high efficiency even make it possible to hide it in a closet, on a false ceiling or mount it under a desk or table. The various stereo line inputs allow simultaneous connections for different sources such as laptops, CD or MP3 players and tablets while having a microphone connected. The switching between the inputs, volume regulation and other function controls can be done in multiple ways: an integrated website makes it possible to control all the functions from any computer with a web browser without requiring additional software while the RS232 connection makes it possible to control the AMP523 with any device supporting serial communication such as a computer or even a home or industrial automation system. Another option is to control the system through smartphones and tablets using the special developed AUDAC Touch™ app.

Using this freely available application for smart devices guarantees total system control and configuration from any device on any location and at any time. To make the installation even more complete, an optional MWX43 or MWX45 wall panel can be installed to control the signal routing and volume level from one or multiple fixed locations. The Class-D amplifier technology, standby mode and included switching power supply makes this device compliant to the highest energy efficiency and environmental requirements. A variety of optionally available mounting brackets for the AUDAC S-Box product range are allowing desk, closet or 19" equipment rack installation.

## Applications:

---

- Education
- Corporate spaces
- Residential

## System specifications:

|                                   |                     |                     |  |
|-----------------------------------|---------------------|---------------------|--|
| RMS Power                         | Satellite           | @ 8 $\Omega$ Bridge | 30 W   |
| Inputs                            | Unbalanced Stereo   | Type                | 4 x Stereo Unbalanced Line   |
|                                   | Balanced Stereo     | Connector           | 18-pin Euro Terminal Block (Pitch - 3.81 mm)                               |
|                                   |                     | Impedance           | 20 k $\Omega$  |
|                                   |                     | Sensitivity (1W/1m) | -10 dBV ~ +4 dBV   |
| Balanced Microphone               | Type                |                     | 1 x Balanced Microphone  |
|                                   | Connector           |                     | 18-pin Euro Terminal Block (Pitch - 3.81 mm)                               |
|                                   | Impedance           |                     | 47 k $\Omega$  |
|                                   | Sensitivity (1W/1m) |                     | -45 dBV ~ -20 dBV  |
| Other                             | Type                |                     | 1 x RS-485 + Differential audio  |
|                                   | Connector           |                     | RJ45   |
|                                   | Type                |                     | 1 x RS-232   |
|                                   | Connector           |                     | SUBD9  |
|                                   | Type                |                     | 1 x Ethernet   |
|                                   | Connector           |                     | RJ45   |
| Outputs                           | Type                |                     | 1 x Stereo Loudspeaker   |
|                                   | Connector           |                     | 4-pin Euro Terminal Block (Pitch - 5.08 mm)                                |
| THD+N (@ 1 kHz)                   |                     |                     | < 0.1%   |
| Crosstalk (@ 1 kHz)               |                     |                     | < -75 dB   |
| Signal / Noise                    |                     |                     | > 95 dB  |
| Power                             | Consumption         | Standby             | < 3.0 W (PSD242 included)  |
|                                   | Supply              |                     | 24V DC (PSD241 switching Power supply included 100 ~ 240V AC / 47 ~ 63 Hz) |
| Efficiency                        |                     |                     | 87%  |
| Cooling                           |                     |                     | Passive  |
| Protection                        |                     |                     | Over heating   |
|                                   |                     |                     | DC Short circuit   |
|                                   |                     |                     | Limiter  |
| Control                           |                     |                     | RS-232   |
|                                   |                     |                     | TCP/IP   |
|                                   |                     |                     | RS-485   |
| Socket Connections (AUDAC Touch™) |                     |                     | 2 sockets  |
| RMS Power                         | @ 4 $\Omega$ Stereo |                     | 2 x 15 W   |
|                                   | @ 8 $\Omega$ Stereo |                     | 2 x 7.5 W  |

## Product Features:

---

|             |          |   |
|-------------|----------|---|
| Dimensions  |          | 108 x 44 x 165 mm (W x H x D)                           |
| Weight      |          | 0.81 kg   |
| Accessories | Included | PSD241 - Power supply 24V / 1.67 A (Efficiency Level V) |
|             | Optional | Wall Controller (MWX45)                                 |
|             |          | WMI18/22 & WLI18/22 Wall input unit                     |
|             |          | MBS1xx Wall mounting brackets                           |
|             |          | TR3030 100V Transformer 30 W                            |

## Variants:

---

- AMP523MK2 - Web-based mini stereo amplifier 2 x 15W

## Shipping & Ordering:

---

|                          |                      |
|--------------------------|----------------------|
| Packaging                | Cardboard box        |
| Shipping weight & volume | 1.13 kg - 0.0078 Cbm |

## Architects' and Engineers' Specifications:

---

The amplifier shall be a mini stereo power amplifier with an output power of 2 x 15 Watt, containing multiple and various types of inputs allowing connections for a wide variation of audio sources combined with a microphone. The amplifier shall be constructed using Class-D amplifier technology and shall be powered by an external switching power supply. Integrated circuitry shall protect against short-circuits or mismatched loads and over-heating. Due to the complete passive cooling of the device, an absolute zero production of hum and noise shall be ensured in all circumstances. It shall contain four unbalanced stereo line inputs and one balanced microphone input with phantom power allowing simultaneous connections for different types of audio sources. The input selection, volume regulation and other controllable functions are available from a web based platform and controllable through RS-232, RS-485 and TCP/IP control ports. A stereo & mono / bridge function shall be provided whereby both outputs can be bridged, delivering merged power to a mono load. All connections shall be made on the front & rear panel of the unit. The signal input connections shall be implemented using terminal block connectors while the output connections shall be performed using a 4-pin terminal block connector. The system shall be expandable through (optional) remote wall audio input and wall panel controller units which are connected to the system using twisted pair CAT5 cabling fitted with RJ45 connectors. The system shall be fully controllable through implementation in a total system control platform which is compatible with a wide variation of operating systems including Android, iOS, Windows, Mac and Linux. This application shall allow creation and customization of application-specific dashboards, allowing combining its controls together with other audio & video equipment from one single dashboard. The amplifier shall operate on a 100 ~ 240 V AC / 50 ~ 60 Hz mains network. The enclosure shall be an S-Box™ modular aluminum enclosure with dimensions 108 x 44 x 165 mm which can be easily mounted and hidden using an optional mounting brackets and the weight shall not exceed 0.81 Kg.

