

AUDIO-VISUAL Series

Multi-Channel Amplifiers



The Media Technology Systems Audio-Visual (AV)-series amplifiers are specifically designed for applications requiring large numbers of low impedance amplifier channels. Such applications include multi-zone systems for restaurants, bars; distributed loudspeaker systems for corporate meeting rooms, auditoriums, lecture rooms; and mix-minus solutions for judicial, legislative and classroom applications.

KEY FEATURES

- 2, 4, 6, and 8 channels
- Four power levels:
 - 75watts/4ohm, 40watts/8ohm
 - 150watts/4ohm, 75watts/8ohm
 - 300watts/4ohm, 150watts/8ohm
 - 600watts/4ohm, 300watts/8ohm (600 watt is available in 2 & 4 CH only)
- Protection against short circuit, over current, DC and over temperature
- Bridged channel pair operation.
- Selectable 110Hz High pass filter, 12dB/Oct
- Optional Control & monitoring of all amplifier parameters
- Optional Serial interface (RS485 multidrop)
- "World Power" Full specification is delivered when operated on any voltage or "brown-out" low voltage conditions. A/C power supply from 86 -265 Volts - 43-63Hz.
- Automatic output changeover in case of channel failure.



Further Enquiries

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The AV series amplifiers employ a Class D output topology for maximum efficiency and does not require high volume, forced fan cooling even with the amplifier running into clip on all channels. In addition, the switch mode power supply (SMPS) incorporates power factor correction (PFC) to comply with incoming legislation and minimize noise pollution of the electrical supply.

The AV series amplifiers provide changeover relays on the output of each channel, where the N/O connection of the relay is available at the rear port of the amplifier. This enables any of the internal amplifier channels to act as a backup in case of primary amplifier channel failure. Alternatively, an external Media Technology Systems amplifier/channel can be used to backup the primary amplifier channel via the same port

The MTS-SMPS technology provides full rated power even when A/C power levels droop. Conventional linear power supplies lose 20% of their output power for each 10% reduction in supply voltage. In contrast, MTS amplifiers provide full rated power and headroom under all reasonable power conditions. Further, the use of SMPS assures continued operation on low A/C power when many products shut down as voltages go out of regulated range.

The AV series amplifiers is available with an optional multi-drop RS485 serial port for control and monitoring of all amplifier parameters, including fault and load monitoring.

The AV series amplifiers provide a switch selectable analog 110Hz high pass filter for protection of zones of ceiling loudspeakers and switch selectable bridge output for each pair of channels.

The AV series amplifier output stage applies an intelligent load limit based on maximum current. The recommended minimum load is 4ohms, but the amplifier can accommodate difficult loads (down to 2 ohms), as long as the current demand does not exceed the rated limit of that channel.



- APPLICATIONS**
- Auditoriums
 - Corporate meeting rooms
 - Legislative chambers
 - Courtrooms
 - Classrooms
 - Training rooms
 - Restaurants
 - Retail outlets
 - Health Clubs



picture of front panels (AV-756)



picture of rear panels (AV-756)



picture of front panels (AV-756S)



picture of rear panels (AV-756S)

SPECIFICATIONS

Performance

Power handling (20Hz-20kHz with all channels clipping-12dB crest factor pink noise):

AV754	4 channel	75W/4ohm	40W/8ohm
AV 756	6 channel	75W/4ohm	40W/8ohm
AV 758	8 channel	75W/4ohm	40W/8ohm
AV 1502	2 channel	150W/4ohm	75W/8ohm
AV 1504	4 channel	150W/4ohm	75W/8ohm
AV 1506	6 channel	150W/4ohm	75W/8ohm
AV 1508	8 channel	150W/4ohm	75W/8ohm
AV 3002	2 channel	300W/4ohm	150W/8ohm
AV 3004	4 channel	300W/4ohm	150W/8ohm
AV 3006	6 channel	300W/4ohm	150W/8ohm
AV 3008	8 channel	300W/4ohm	150W/8ohm
AV 6002	2 channel	600W/4ohm	300W/8ohm
AV 6004	4 channel	600W/4ohm	300W/8ohm

OPTIONAL CONFIGURATIONS

Serial (-S) versions (eg AV754S): In the S-Versions of the Media Technology Systems Audio-Visual series amplifiers, each amplifier channel includes an analog VCA (for remote level/mute control) and a microcontroller with 12 A-D converters (10bit accuracy). The microcontroller enables remote monitoring of pre/post attenuator input signals, output current and voltage signals to the loudspeaker, output clip, rear panel HPF and bridge settings, heat-sink temperature, short circuit, channel overcurrent and DC conditions. The microcontroller allows remote relay muting/disabling of the amplifier channels.

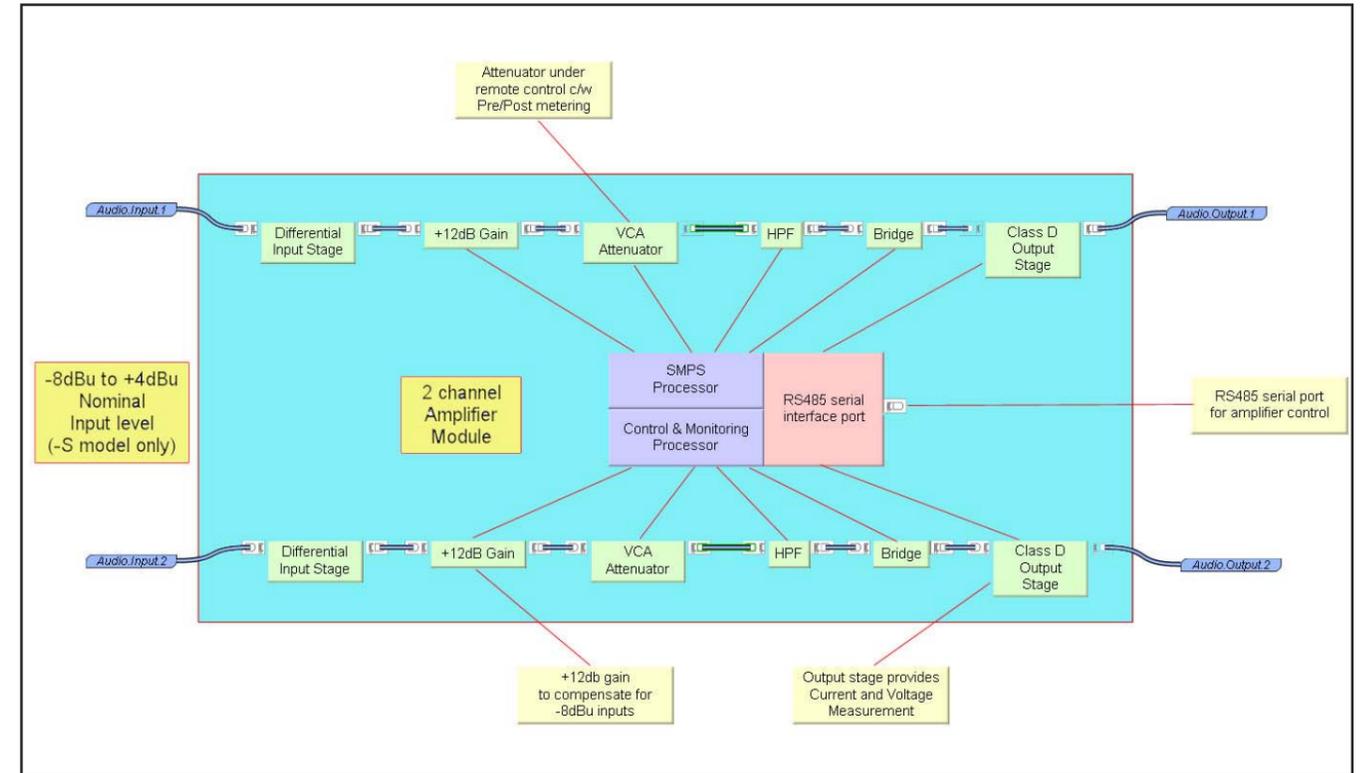
The VCA on each of the analog audio channels has a 12db gain stage, so consumer line level signals (eg. DVD, VCR, CD, etc) can be accommodated.

The -S configuration provides multidrop serial (RS485) for control and monitoring, where up to 32 amplifiers (up to 64 channels) can be connected to one host computer port or third party AV control system.

As the amplifier provides measurement of output voltage and current, a host computer can monitor line impedance and thus short

or open circuit.

The amplifier has a separate microprocessor controlling the switch mode power supply. This enables remote monitoring of the front panel local/remote switch, amplifier model, power supply rails, power supply temperature, over current and over voltage conditions. The SMPS microprocessor will also provide remote standby/power on control of the amplifier module(s) high voltage supply.



Recommended loudspeaker impedance Minimum 4 ohms.

Frequency response 20Hz-20kHz (+/-0.5dB), any channel driven, less than 0.3%THD

Sensitivity 1.22volts RMS (+4dBu) develops full output at minimum attenuation setting (Standard amplifier) and 0.308volts RMS (-8dBu) develops full output at minimum VCA attenuation setting (-S serial models only)

Noise Less than 100dB

Input clipping +24dBu

Output Class D

Power Supply Switch Mode Power Supply -SMPS with Power Factor Protector-PFC. Auto-ranging between 86-265 Volts, 43-63Hz. Appropriate fuses for power ranges 100-120volts and 220-240volts must be selected

Input impedance 10k balanced

Connectors Inputs & RS485 ports (-S models only)-Euroblock 3 pin 3.5mm, Outputs-Euroblock 4pin 5.08mm, Network Neutrik EtherCon

Cooling Air-Exchange fan on the PFC

Physical 2U High (87.9mm), 19" wide (483mm), 18 1/2" deep (470mm)

MODEL SUMMARY

75x	Standard 75watt amplifier
75xS	75x with Serial port and control/monitoring capability
Where x = 4, 6, or 8 channels (6 models)	
150x	Standard 150watt amplifier
150xS	150x with Serial port and control/monitoring capability
300x	Standard 300watt amplifier
300xS	300x with Serial port and control/monitoring capability
Where x = 2, 4, 6, or 8 channels (16 models)	
600x	Standard 600watt amplifier
600xS	600x with Serial port and control/monitoring capability
Where x = 2 or 4 channels (4 models)	