



## 100W 4x6 DSP Matrix Amplifier

AD-46-100

SKU: 157306    UPC: 810064991189

The AD-46-100 is a 4x6 DSP Matrix Amplifier for distribution of four audio sources to six zones, with four zones amplified at 100 Watts. Two zones feature preamp outputs to integrate external power amplifiers or subwoofers. The AD-46-100 enables seamless routing of both digital and analog sources to any desired zone and features a comprehensive set of DSP controls. This includes a 5-band parametric EQ, allowing integrators to fine-tune acoustic characteristics and tailor sound to specific spaces, plus mixing and auto-ducking features facilitate seamless integration of microphones and doorbells, effortlessly prioritizing audio sources and ensuring smooth transitions. Configuration and DSP functions can be customized directly within Integration Designer or with the intuitive web GUI, enabling the AD-46-100 to work in standalone mode or within another control system environment.

Amplification is with an efficient Class D Cool Power design that optimizes performance while minimizing heat generation. Up to 100W per channel power output (all channels driven) provides for a robust and clear audio experience even in demanding environments. For projects that need more power, integrators can bridge outputs to enable a 200W per channel output.

For projects that need more zones, up to eight AD-46-100 chassis can be combined to deliver 32 amplified and 16 preamp zones.

### Features

- Four analog audio source inputs and two mirrored digital inputs (mirrored analog inputs).
- Six stereo audio output zones with four amplified stereo and two preamp stereo outputs.
- Class D amplifier provides a robust and clear audio experience with 100 Watts @ 4 $\Omega$  per channel per zone.
- Distribute four audio source inputs to six zones, expandable to 48 zones.
- Fine-tune acoustic characteristics for each zone with the 5-band parametric EQ, mixing and auto-ducking features.
- Configure and optimize DSP and matrix settings.
- Multiple control options with RS-232, IP and IR.
- Rack mount or free-standing installation.

Analog Sources	4 RCA (Stereo)
Digital Sources	2 Coax and 2 Optical (Mirror Analog 1 & 2)
Loop Out	4 Analog + 2 Digital
Amplified Zones	4 Stereo (16 Channels)
Preamp Zones	2 Stereo or 4 Mono (4 Channels)
Audio Zone Expansion	Up to 48 zones by combining up to 8 AD-46-100 units
Input Impedance	20k $\Omega$
Amplifier	Class D
Power @ 8 $\Omega$	50W/Ch (all channels driven)
Power @ 4 $\Omega$	100W/Ch (all channels driven)
Power @ 8 $\Omega$ Bridged	200W/Ch bridged (8 $\Omega$ ) (all channels driven)



Analog Input	2 Vrms Maximum
Analog Output	2 Vrms Maximum. Volume controlled
Volume Range	0-100 (-80dB - 0dB)
Digital Optical Input	Up to 192kHz/24Bit sample rate. PCM only
Digital Coaxial Input	Up to 192kHz/24Bit sample rate. PCM only
THD-N	THD+N <0.01%, 1kHz @ 1/8 rated power THD+N <0.05%, 20Hz-20kHz @ 1/8 rated power
SNR	>95 dB, A-weighted input to output @rated power @Amp >100 dB, A-weighted - input to output @ preamp out
Frequency Response	20Hz – 20kHz +/- 2 dB @ 4? and 8?
Dynamic Range	>95dB A-weighted
Sampling Frequency	48kHz
RTI or 3rd Party Control	IP (RJ45), RS-232 (RJ45) and IR (3.5mm mono)
AC Input Voltage	100-120V/ 220-240V~, 50/60Hz, 800W
Power Switch	Front Panel On/Off with LED power indicator
Dimensions (WxHxD)	17.2" x 16.4" x 3.5"
Weight	22.88 lb