

ADP-12M



DATA SHEET

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- ▶ Class D Powered (bi-amplified)
- ▶ Integrated Digital Processing
- ▶ Internal temperature control
- ▶ Electronic protection
- ▶ FIR linear phase filtering
- ▶ Online monitoring available



APPLICATION:

- Reinforcement
- Stage monitor
- Portable installation
- Compact voice reinforcement

GENERAL DESCRIPTION:

The ADP-12M Stage monitor is part of the ADP Self powered, DSP integrated Series. It has been designed to offer the utmost sound reinforcement reliability, incorporating the latest acoustical and electronical technology and delivering incredible, dynamic sound.

The ADP-12M is an extremely high power, high sensitivity two-way stage monitor providing exceptional performance. It uses a 12" coaxial (3" voice coil) woofer with demodulating rings for lower distortion and smoothed response and a 3" VC compression driver with composite titanium/mylar diaphragm and a 60° x 40° dispersion horn.

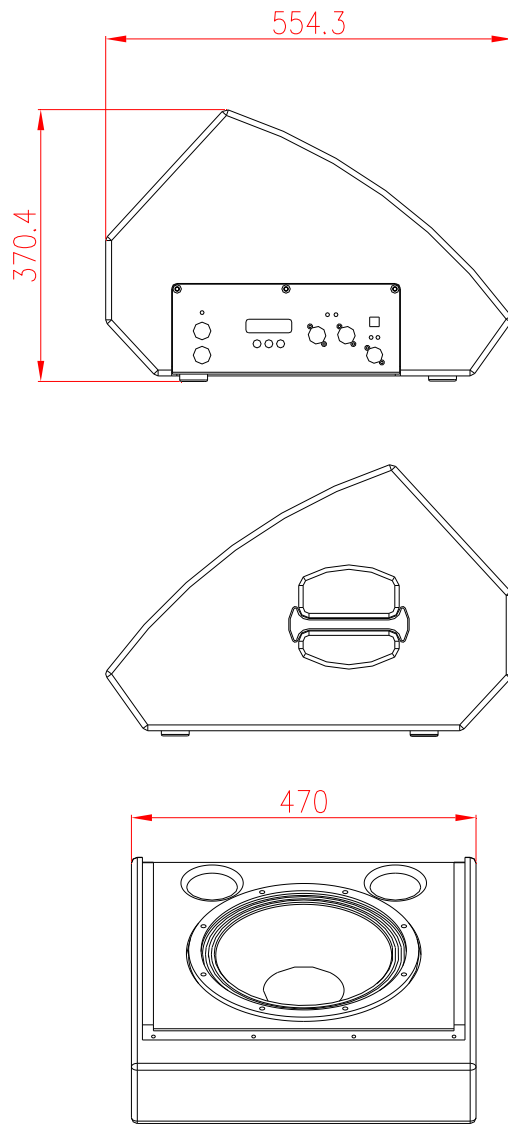
The ADP-12M is powered with a total of 1500W of class D amplification, 750W for the low/mid frequencies and 750W for the high frequencies. Each cabinet has a DSP integrated for system protection and optimization. This DSP applies linear phase (FIR) and classical crossovers. Other features include temperature sensor, fan speed control, Ethernet options and many more.

Weight and performance are two important considerations when choosing a monitor. The ADP-12M has an unbeatable power to size ratio, there is no need for external amplification racks, is very light weight and as such is the ideal solution for portable or fixed sound reinforcement enabling quick and easy set-ups.

SPECIFICATIONS:

FREQUENCY RANGE	60Hz -20KHz
FREQUENCY RESPONSE	75Hz- 18KHz ± 3dB
COVERAGE	60° x 40°
MAX SPL	129 dB/ 132dB peak
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TRANSDUCERS	LF/MF: 12" (3" voice coil) coaxial 4 Ohm, Neodymium magnet HF: 1.4" exit throat 3" Titanium diaphragm
SHAPE	Trapezoidal
POWER AMPLIFIER	1500W Class D with Switching Power supply 750W Low/Mid + 750W High
DSP	Internal LYNX processor DSPB-22® with FIR filters
CABINET ADJUSTMENT	Back panel LCD screen
INTERNAL CONTROLS	Temperature sensor
SIGNAL CONNECTION	NEUTRIK connectors XLR Male Input XLR Female Loop Thru
CONTROL CONNECTIONS	USB (DSP programming), ETHERNET* (Online Monitoring System OMS®)
AC POWER	230v / 115v selectable. 50/60 Hz 5A
AC CONNECTIONS	16A NEUTRIK POWERCON with Link Output
CONSTRUCTION	15 mm Premium Birch plywood
FINISH	High resistant water-based black paint
FRONT DESIGN	Antirust black metal grille
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DIMENSIONS (H x W x D)	370 x 470 x 554 mm
WEIGHT	20 Kg (44 lbs)

* Ethernet connection is optional.



Dimensions in mm.

KEY FEATURES AND BENEFITS:

SELF POWERED

Bi-amplified Class D with switching power supply. Includes one 750W power module for the 12" transducer and one 750W power module for the HF driver. The amplification far exceeds the transducers needs thus resulting in high output, high damping factor and extremely low levels of distortion.

DIGITAL PROCESSING & DOUBLE DYNAMICS

Latest generation 24bit/96Khz digital processor which optimizes the system components. It includes 2 channel processing electronics with functions for phase correction, driver protection, gain control, equalization, classic crossover and linear phase filtering, using double precision filters with 56bit internal processing. This enables a noticeable reduction in distortion with clean and clear equalization. The DSP incorporates sophisticated double protection limitation; RMS and Peak. The RMS limiter is used to adjust the transducer reproduction level, maintaining the original dynamics whilst at the same time respecting the original transients and achieving a better acoustical result. The Peak limiter controls the movement of the speaker, protecting it from any damage and also reducing distortion caused by over-excursion. These double dynamics lower levels of distortion and provide protection for all the speaker components and internal electronics.

TEMPERATURE & PROTECTION CONTROL

Via internal sensors a micro controller analyzes in real time the temperature of each power module. It then automatically adjusts the fan speed to apply the correct temperature dissipation, reducing both the speed of the fan and the noise generated leaving the system as quiet as possible.

COMPONENTS

12" coaxial neodymium speaker with 3" voice coil compression driver. Modified exponential horn flare for improved acoustic loading and controlled coverage. Waterproof cone for outdoor use. Low weight and compact common magnet system design.

HARDWARE

Cabinet constructed from premium birch plywood and finished with high-resistant water based black paint.

SOFTWARE:



- ONLINE CONTROL SYSTEM

Offers detailed system information for each cabinet and via ethernet or PC controls the cabinet/s in real time.



- RAINBOW

Acoustical Prediction software for accurate loudspeaker planning offering both horizontal and vertical views.

FREQUENCY / PHASE RESPONSE

