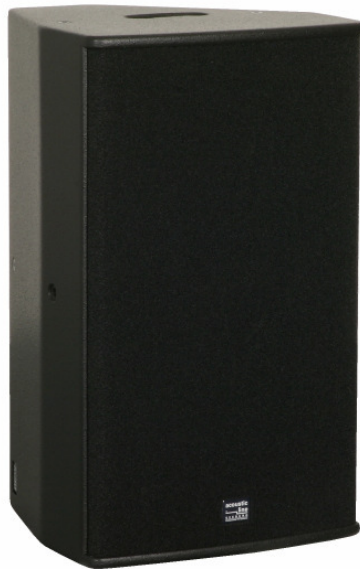


User Manual

# A6 dp

Last update: 01/2009





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## Foreword

The A6 dp is a multifunctional high-end loudspeaker box with integrated digital amplifier electronics with a 1000 Watt output and DSP controller. Various factory-configured presets and volume settings can be selected. The passive crossover is optimised in phase and frequency response.

High-grade electronic components from the industrial sector and a first-class circuit design ensure excellent audio quality with low distortion and effectively minimise static noise. Highly efficient and “intelligent” limiter systems ensure optimum protection against overload, without restricting the possibilities offered by this high-performance sound system.

If you would like any additional information on or have any suggestions pertaining to this manual, please contact:

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Technical data are subject to change.



## Safety instructions

Do not operate the A6 dp if you have any concerns regarding safety or if the loudspeaker box should malfunction. The equipment has no user-serviceable parts inside. In the event of repair, please contact your dealer or qualified personnel respectively.

Connect the A6 dp to a 230V/50Hz grounded safety socket. The equipment corresponds to protection class 1. In case of overload, a protective element is activated which reliably protects the amplifier module and the DSP. However, it must then be replaced by an authorised service centre.

Always remove the mains plug when opening the loudspeaker box (for example when turning the horn).

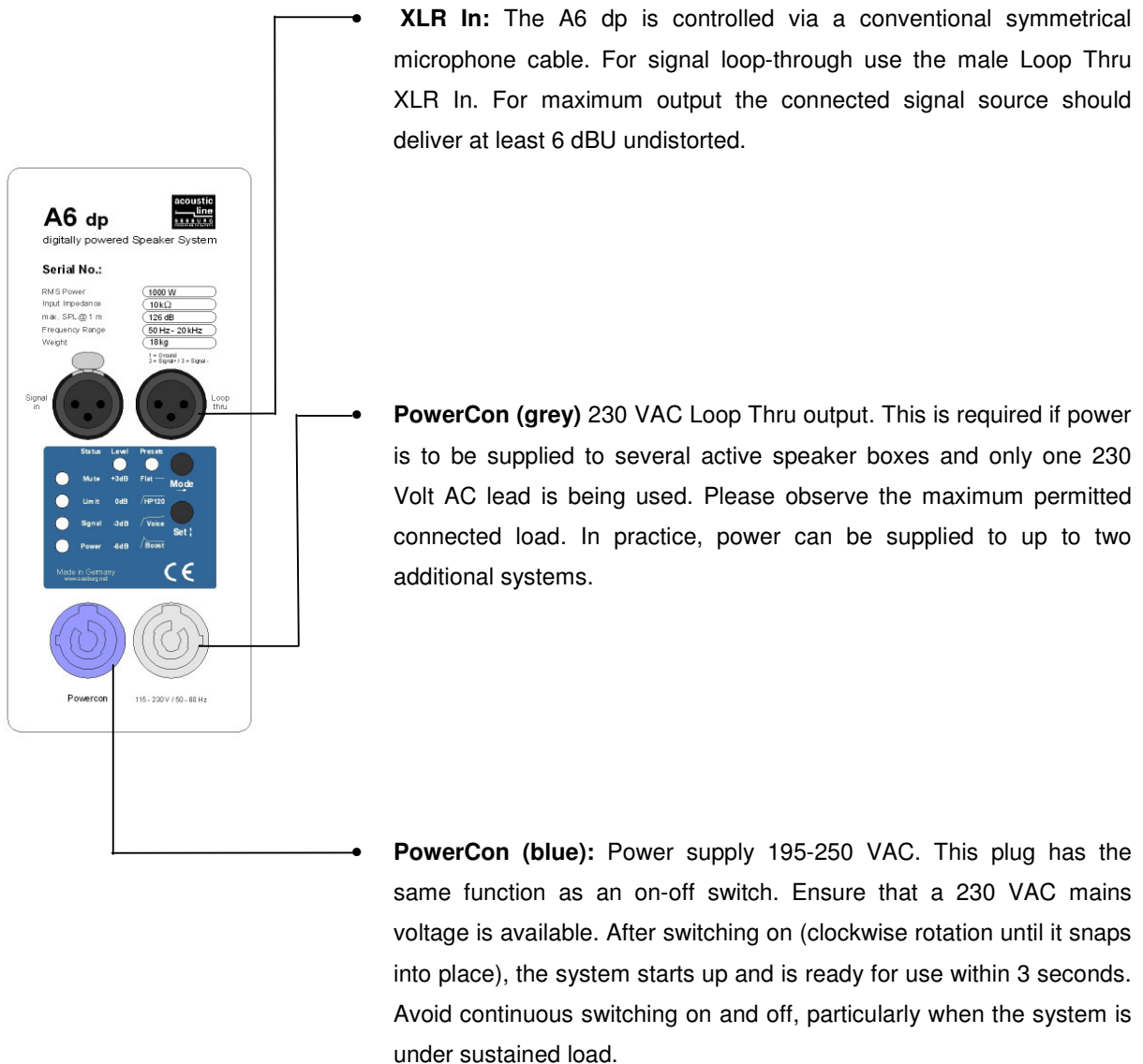
Do not expose the A6 dp to rain and, if possible, do not operate the speaker outside of a temperature range of  $-5^{\circ}\text{C}$  to  $40^{\circ}\text{C}$ . Bear in mind that strong thermal fluctuations result in the formation of condensate, therefore do not operate the speaker until the speaker box has assumed the ambient temperature. Do not switch the equipment off if it is being used in adverse conditions.

In order to avoid overheating of the speaker chassis and the built-in amplifier module, never operate the A6 dp in the close vicinity of intense heat sources and avoid direct sunlight.

After several hours of operation the housing (especially all-metal parts such as the speaker stand flange and connection panel) can reach temperatures of more than  $40^{\circ}\text{C}$ .

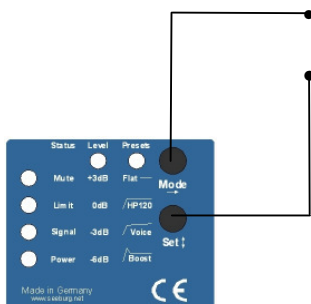
## Part 1 – Connections and indicator functions

### Connectors





## Control Elements



**MODE** button: changing to control modes Status / Level and Presets.

**SET** button: Setting of various values and Mute on/off

## Status indicators

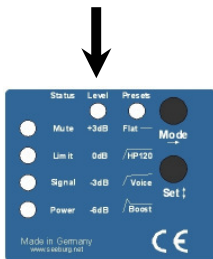
- **Mute LED:** red light when the system is muted (press Set button in Status mode) or under technically crucial conditions.
- **Limit LED:** yellow light when the limiter is restricting the level of the amplifier.
- **Signal LED:** green light if a signal exceeds  $-20$  dBU. This also applies when the mute function has been activated.
- **Power LED:** lights up when the system is switched on.

## Part 2 – Operation

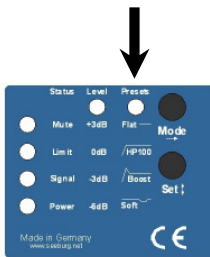
### System start-up

The previously selected setting is maintained when the equipment is switched on. The system is then in Status mode. If the red Mute LED lights up according to the previous setting, there is no signal being transmitted. If the Set button is pressed once, the mute function is deactivated, the Mute LED goes off and the system transmits a signal.

### Adjusting sound levels



By pressing the Mode button once you will gain access to the Level mode, permitting adjustment of the volume in 3dB stages. Four different values +3dB, 0 dB (standard), -3dB and -6 dB are available. Adjustment is effect via the SET button. The green LED located above it indicates which mode you are currently using, whereby the four vertically arranged LEDs (now green) indicate each value set.

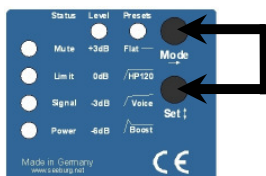


### Accessing presets

By pressing the MODE button twice you will gain access to the Preset mode. Three different presets and an additional Soft mode can be selected via the SET button:

- **Flat** : This setting facilitates a linear frequency response. Frequencies below 100 Hz are not boosted electronically. This preset is usually used when the system is being operated without a subwoofer.
- **High-pass filter (HP)**: Use in combination with subwoofers. Low frequencies are lowered.
- **Voice**: By raising of the level within the presence and treble range slightly and a lowering the low-mid range, particularly assertive voice reproduction is achieved. This setting is recommended when using dynamic microphones (e.g. Shure SM58).

**Boost**: Same setting as Flat mode, but with increased bass response. This setting is recommended for full-range applications when a balanced bass response is needed although subwoofers are not being used. The attainable level within the bass range is, however, limited



**Lock function**: If the SET and MODE buttons are simultaneously pressed for more than three seconds, the operational function is disabled. Press the buttons again in the same way to release the lock.



# A6dp digitally powered multifunctional Sound System

The A6dp (dp = digitally powered) is a multifunctional high-power loudspeaker offering extraordinary fidelity and high power in a very compact package.

The integral digital amplifier offers 1000 watts total output power and is controlled by a DSP.

Flat amplitude and phase response are optimized in the integral passive crossover.

Several factory set volume settings & presets can be recalled.

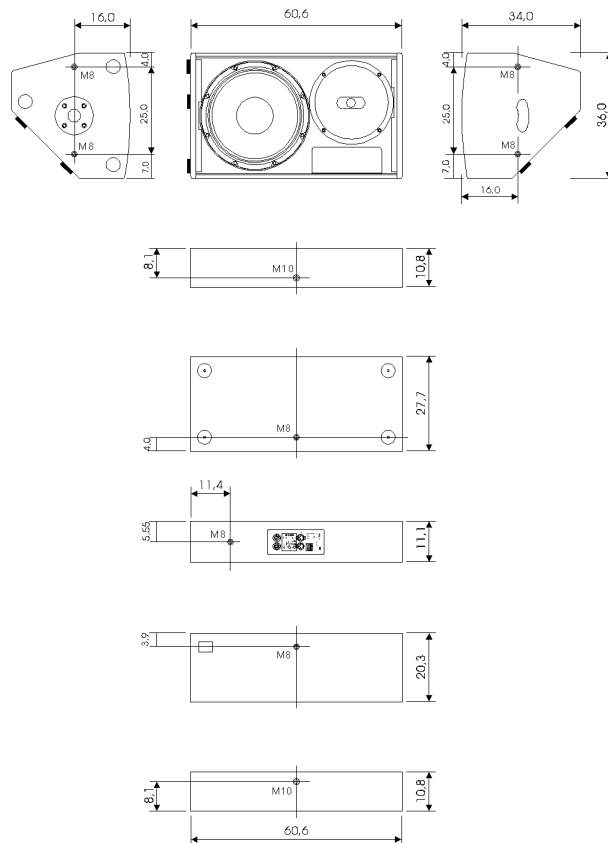
Extraordinary fidelity and capability to accept very high input levels is assured by first class design and high quality industrial electronic components, also minimizing noise.

A high effective and intelligent limiting system guarantees overload protection without limiting system capabilities.



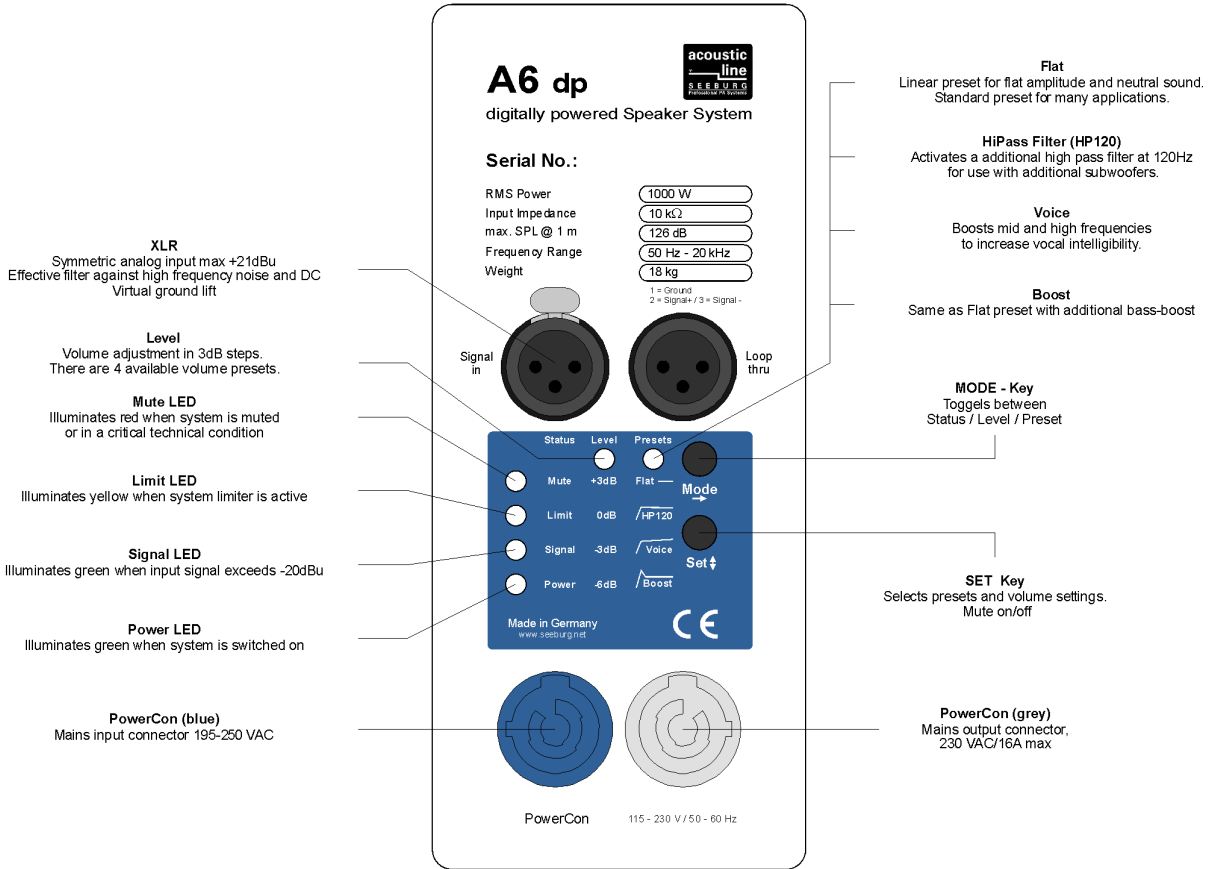
## PRODUCT SPECIFICATIONS

Speaker Components	12" Neodym / 1"
Description	Multipurpose Sound System
Power	1000 W EIA / 195-250 VAC
Max Line Input	+21dBu
DSP	32bit RISC
Internal Signal Path	32bit fixed-point, 64bit accumulator
	64bit IIR-coefficients
AD/DA	24bit / 48kHz
Latency	1.54ms (analog in to analog out)
Signal/Noise Ratio	115dB
All components comply with industrial temperature range	
SPL max 1m	126dB
Frequency Range	50Hz - 20kHz (Flat-Preset)
Tuning Frequency - Excursion min.	60Hz
X - Overpoint - acoustical	1,3kHz
Connectors	Neutrik XLR in/out
	Neutrik PowerCon in/out
Coverage - horizontal / vertical	90° x 60° - rotatable
Handles	ergonomic handle on top
Rigging - flying points	2 x M10 / 7 x M8
Fittings	35mm pole mount
Weight	18kg
Size - height x width x depth	60,6 x 36,0 x 34,0 cm
Order Number	0260 dp

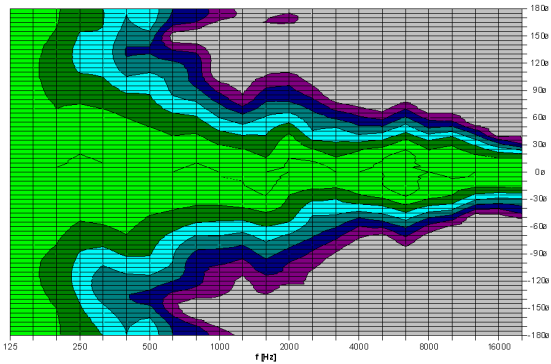


# A6dp

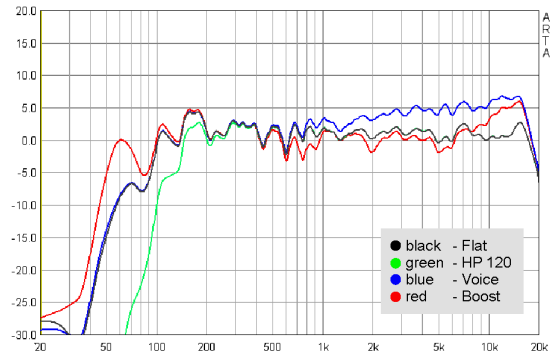
digitally powered multifunctional Sound System



A6dp 90°x 60° horizontal - 2D Directivity Plot



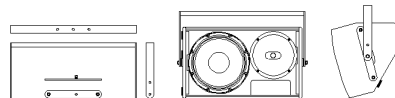
A6dp - Presets - Frequency response



## Accessories ( additional accessories you will find in our general catalogue )

### Flying Bracket for A6 / A6dp horizontal assembly incl. screws

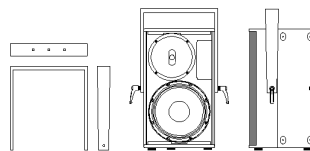
( per unit: 2 pcs adapters, M10 hex lock nuts, flat- and rubber washers.  
 - optional feature: 2 pcs M10 x 20 ergostyle lobe knob )



Order Number: 01216H set

### Flying Bracket for A6 / A6dp incl. screws

( per unit: 2 pcs M10 x 30 adjustable clamping lever )



Order Number: 01216 set