

# Let's get technical.

A48



 **audio pro**

SOUND OF SCANDINAVIA

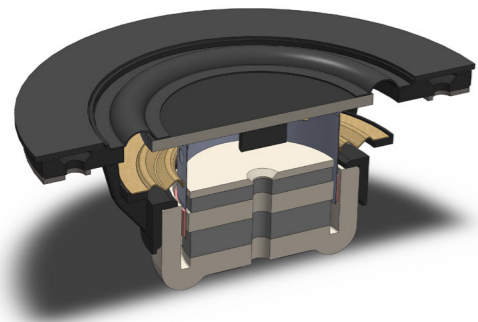
## INTRODUCTION

At AudioPro we have designed active speakers since 1978. From the legendary A4-14 - an active 3-way standmount and the B2-50 subwoofer all equipped with the patented AceBass technology. The A48 continues the legacy with the use of state of the art DSP technology. The A48 is a high performance fully active stereo floorstanding loudspeaker. It has 320W of built in amplification with high resolution streaming capability. It was conceived to be the perfect partner for the modern TV with ARC connectivity and of course the perfect streaming solution for your favourite music. A48 is a two-way bass reflex design with a cabinet made of MDF (up to 18mm thickness).

## DRIVE UNITS

### High frequency driver

*No dome tweeter?* In A48 we choose to implement a patented technology called BMR which stands for Balanced Mode Radiator. Compared to a normal tweeter, soft or hard domes alike, the BMR driver can cover a much wider operating range. In A48 we use a 2" BMR with an advanced neodymium magnet system. The flat sandwich disc is carefully designed and as the name implies driven by the voice coil "balanced" on its second average nodal point. Included is also a balancing mass mounted on the back of the disc to eliminate any residual resonances. The benefit is a single wide dispersion sound source covering everything above 700Hz in A48. By moving the crossover point down from the typical 2-3kHz region to 700Hz gives a much less noticeable transition between the woofers and the "tweeter" i.e BMR. The human hearing mechanism is most sensitive in the 2-4kHz region so it is a big plus to get the crossover out of this region. Another advantage is that the comb filtering effects, common with separated drivers, are eliminated in this critical region.

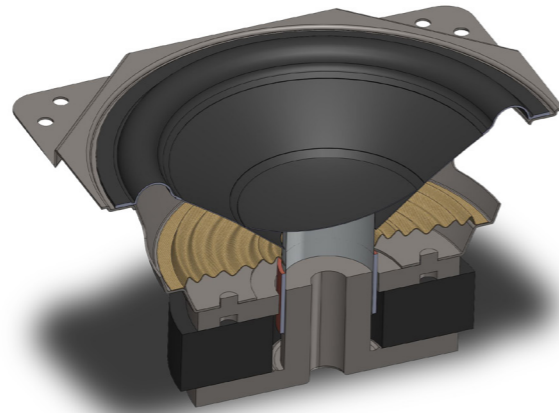


### Benefits:

- Behaves like a point source = precise and detailed stereo imaging.
- Wide dispersion gives a wider sweet spot where you can enjoy best possible sound quality.
- Very good handling of voices.
- Eliminates the sometimes "shouty" quality you can get from a cone shaped diaphragm.

### Low frequency driver

In A48 we have implemented dual 5,25" long throw woofers. The active surface area of these two woofers equals the surface of an 7,5" driver. Available surface area and throw length is critical in achieving a deep and powerful bass reproduction, it is a question of moving air. Thanks to the low crossover frequency to the BMR driver we can use pure subwoofer drivers.



### Benefits:

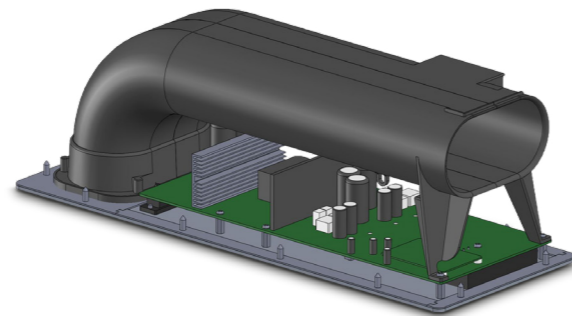
- Dual long throw woofers with large radiating surface area means powerful bass reproduction with no need for an external subwoofer.
- Using multiple smaller drivers gives a fast and detailed bass reproduction.

## AMPLIFICATION

### Four channel amplifier

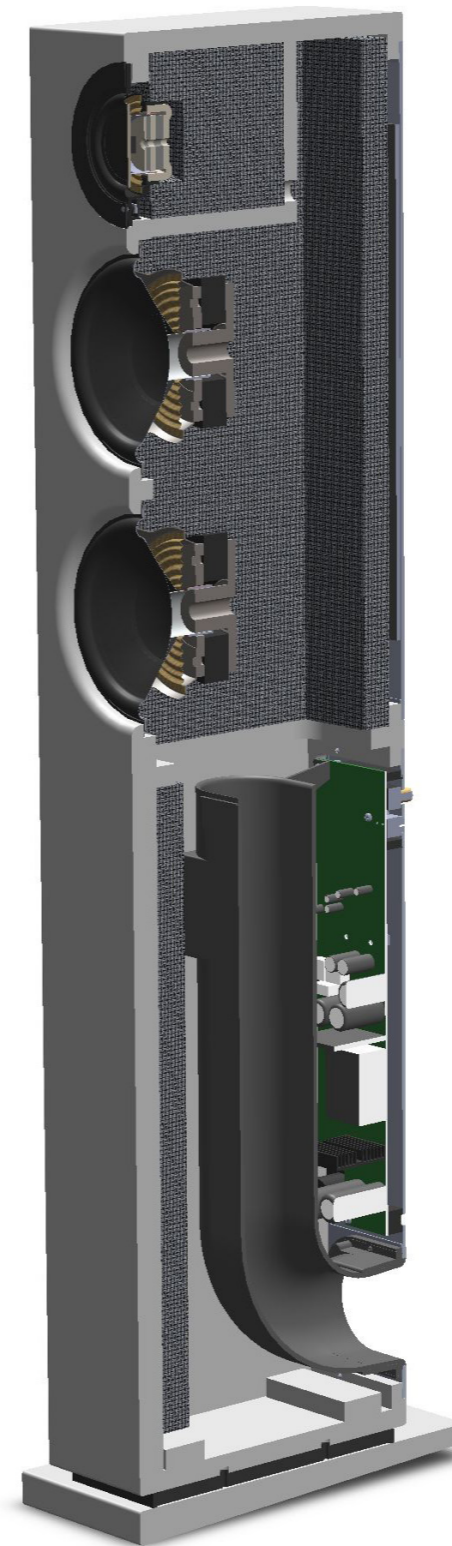
The A48 is a fully active speaker with four (4) separate amplifier channels optimized for the specified drivers. The core of the A48 is a highly efficient Class D amplifier with a total power output of 320W, 2x130 W for the woofer section and 2x30 W for the high frequency section.

All crossovers and specific equalization is carried out in the realm of DSP (Digital Signal Processing). The DSP is handselected from legendary Analog Devices.



### Benefits:

- All things being equal - an active speaker will always sound better than a passive.
- With the A48 we have gone fully active - no passive crossover components between the amplifiers and the drivers that can colour the sound. All passive components add some distortions that are all too obvious when you remove them and go active.
- The amplifiers have total control of the drive units without a passive network slowing things down.



### SpeakON

The Left speaker houses all electronics and powers the Right speaker using a 4-conductor OFC speaker cable equipped with pro-grade SpeakON connectors.



## THE CABINET

### Enclosure design

The A48 is made from acoustically inert MDF material with thickness up to 18mm. Bracing is implemented in selected positions within the cabinet. The BMR has its own sealed volume of the box and its carefully tuned with selected sound absorbent material. The cabinet is a bass reflex design to maximize bass extension and efficiency. With the use of a very large injection moulded and aerodynamically shaped bass vent we can keep air flow noise at a minimum.

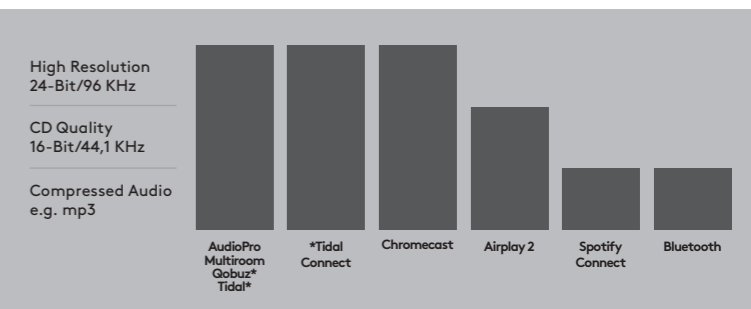
As a finishing touch a selection of satin finish coating is available.

### Benefits:

MDF as a material is superior in a loudspeaker compared to plastic compounds used by some other manufacturers. The result is a cleaner sound with a more detailed sound stage.

## STREAMING METHODS COMPARISON

AudioPro have worked with WiFi streaming for many years and the diagram below gives a good picture of why we strongly believe that WiFi is the choice for high quality audio products in the home. It's not only beneficial for ultimate streaming resolution - it is also the only way to stream music safely without losing connection when you walk around in your home.



\*You will need a subscription to a music streaming supplier to get access to High Resolution Music.

## INPUTS & OUTPUTS

The A48 has a vast selection of inputs to satisfy all possible requests.

INPUTS	TYPE
WiFi	24 Bit/96 KHz
ARC	24Bit/96KHz
Optical	24Bit/96 KHz
Line	RCA
Bluetooth	BT 4.2
OUTPUTS	
Sub Out	RCA

## DIMENSIONS & WEIGHT

ENCLOSURE SIZE	
Height	870 mm
Width	215 mm (Base)
Depth	265 mm (Base)
Box size	985 x 650 x 320 mm (1 Pair)
WEIGHT	
Active (L)	11 kg
Passive (R)	10 kg
*Weight, 1 pair	25,4 kg

\*Shipping

