



## INTRODUCTION

Back in 2008, we in Argon Audio launched our first active speaker, the 7350A, a powerful little speaker that defined our value-for-money statement. Since then, we have been gradually improving upon our active speaker platforms. Now we are proud to introduce the FORTE A55 active speakers - our best active speakers yet. With innovative technology and custom designs, we are setting new standards for what can be expected from active speakers at this price point. As always, we have engineered and designed everything in Denmark, ensuring you get the highest quality possible in everything from the beautiful cabinet to the amazing sound quality.

Just like the other speakers in the FORTE-series, each driver has its own amplifier and an advanced signal

processing [DSP] that ensures maximum performance no matter the volume. The soft dome tweeter delivers crisp and open highs, while our custom designed woofers featuring a special 2-layer cone and ultra low distortion motor system gives high impact in the low frequencies while maintaining a crystal clear midrange.

High quality Bluetooth aptX and AAC means that you are hearing wonderful music within seconds after setting the FORTE A55 up. A wide selection of inputs is available on the back of the speaker ranging from 2 x Optical inputs with high-res support, a high quality phono stage and a line input.



# CABINET

## DESIGNED IN DENMARK

The FORTE A55 sports a minimalistic Danish design, in either matte black or white, making it fit into any home. The front fabric is mounted with magnets for a clean look when removed. Around the drivers a stylish aluminum trim ring in copper or silver finish, depending on your choice of color, adds the finishing touch. You'll be hard pressed to find this level of finish anywhere else in this price range.

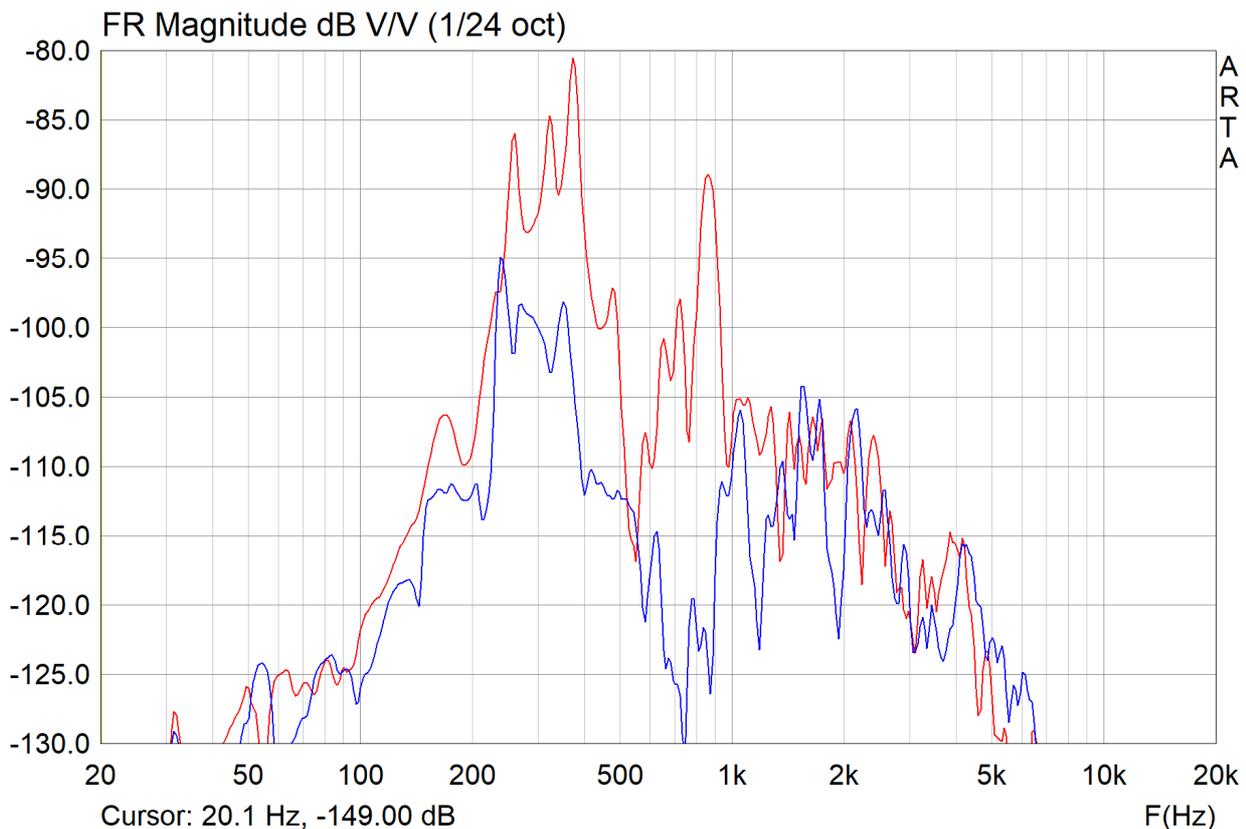
## AUDIOPHILE CABINET DESIGN

Internally is where the magic happens. In designing the cabinet for FORTE A55, we used extensive computer analysis to optimize the cabinet. Advanced FEA modal and vibration analysis was used to design a new internal bracing structure that greatly reduces vibrations compared to regular cabinet designs.

One of the challenges with floor standing speakers is standing wave resonances internally caused by the long path inside the cabinet.

Most speaker designs try and address this by extensive use of dampening materials, but this compromise can affect the dynamics of the speaker. Another solution is to split the cabinet into smaller sections, but this just moves the resonances up in frequency, affecting the critical midrange.

For the FORTE A55, we designed a new acoustic flow resistor we call the *Argon Audio Resonance Control*, that's placed between the woofers, which eliminates the standing wave resonances while keeping the speaker incredibly dynamic.



Blue: Forte A55 with *Argon Audio Resonance Control*  
Red: Same cabinet without *Argon Resonance Control*



# WOOFERS

## CUSTOM CONE DESIGN

With the custom woofers for FORTE A55, we hit it out of the park. We designed a special 2-layer cone based on a straight profile paper cone laminated with a fiber concave cone. We call this solution the *best of both worlds*, as this new woofer effectively solves the two major issues with standard paper cones: Cone edge resonance and distortion caused by nonlinear cone breakup. The result is the bass performance of a paper cone with the clarity and low distortion from a fiber cone.

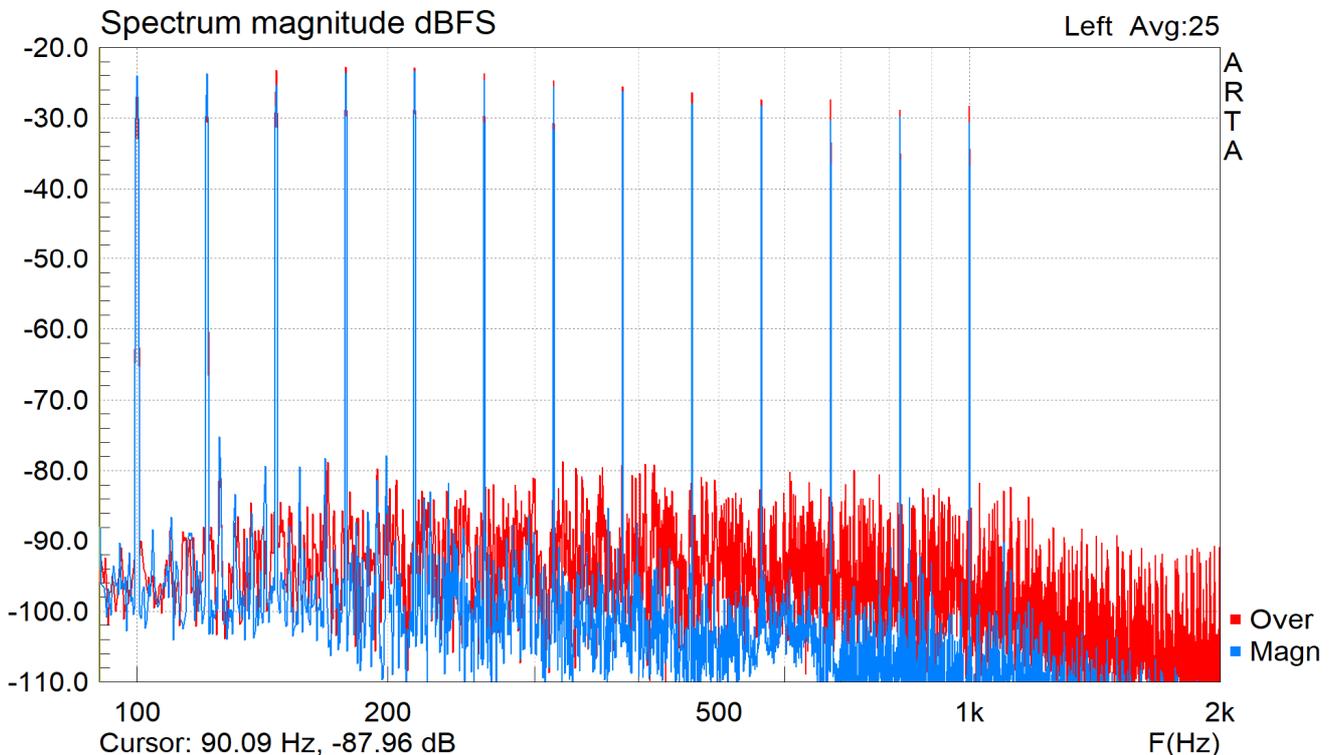
Since the cone itself naturally controls resonances and distortion, this also enabled us to add a low loss rubber surround for improved dynamics - meaning you get an engaging, musical delivery at any volume.

## LOW DISTORTION MOTOR SYSTEM

Alongside the improvements to the cone, we have also developed a new ultra low distortion motor using high grade, low electrical conductive iron and an optimized shorting ring.

All of this means that you get a state of the art woofer, which plays with high impact all the way down to 35 Hz, while at the same time delivering a crystal clear midrange at any volume.

As shown in the graph below, the FORTE A55 woofer delivers up to 10 times less distortion compared to a normal paper cone woofer with a standard motor system.



Red: High quality woofer using paper cone and a normal motor

Blue: FORTE A55 woofer with 2-layer cone and ultra low distortion motor



# AMPLIFIER AND DSP

## ADVANCED DESIGN

In order to ensure maximum performance at any volume, we have utilized an advanced signal processor [DSP] to control every aspect of the speaker. Through DSP we can improve the sound of the speakers in ways that would never be possible in normal, passive speakers.

Besides DSP, we utilize an active crossover, meaning that each driver has its own dedicated amplifier, completely eliminating the need for passive components in the signal path.

Feeding all of this is a highly efficient, digital amplifier, rated a 4 x 80 watts, which has more than enough power to ensure a distortion-free sound even at very high volumes.

This direct coupling of amplifier and driver alongside separation between the drivers adds to the impressive dynamics and clarity the FORTE A55 delivers, delivering you a sound quality way beyond what you can get at the same price in a passive speaker design.



# CONNECTIVITY

## MODERN WITH A RETRO TOUCH

With a total of 5 inputs, there are plenty of options to connect all of your gear, from future looking wireless connection to those classic analogue inputs. A handy little remote is included for easy volume and input control. However, with auto-power up on all inputs [except phono], most of the time you will not even need the remote as the speakers will automatically turn on and start playing as soon as it senses a signal.

### *Bluetooth*

Easily connect your phone or computer wirelessly to the speakers using the high quality Bluetooth connection. Support for aptX LL [Low Latency] and AAC delivers amazing sound from all devices.

### *Optical*

Supporting high-res audio up to 24-bit/96kHz the two optical inputs is the go-to connection for TV's and external streamers.

### *Phono*

Connect your turntable directly to the FORTE A55. Thanks to a high quality built in RIAA [MM], you are guaranteed an amazing listening experience.

### *Line*

For use with any regular device with an analogue output, connect everything from CD-players to turntables with built in RIAA.

### *Subwoofer output*

If you crave even more bass than what the FORTE A55 already delivers, the subwoofer output can be used with any subwoofer that has a regular RCA-input.

# TECHNICAL SPECIFICATIONS

- Treble: 1" soft dome with neodymium magnet
- Bass/Midrange: 2 x 5" Custom 2-layer cone with low distortion motor system
- 2-way speaker, ported
- Frequency range: 35-20,000 Hz  $\pm$  3dB
- Active DSP-powered crossover
- 4 x 80 watt Class D amplifier
- Inputs: 2 x optical digital, L/R RCA [analogue], phono [MM], Bluetooth 4.2 [aptX Low Latency and AAC]
- Subwoofer output
- 5V USB output [eg. for Chromecast Audio]
- Front fabric magnetically attached
- Auto power up on all inputs except phono
- Dimensions: 16,5 x 85,0 x 25,0 cm [incl. front grille and foot] [WxHxD]
- Weight: 26 kg [set]
- Dedicated speaker cable [5 meters] and remote control included

