

# AS Series

## PRODUCTS

### Equalization and X-over recommendations

Rév. D EN 05/2015



## Amplifiers

The electro-acoustic components used in the AS-3, AS-5 and AS-S10 speakers have been developed to ensure an ideal level of performance within the following frequency and amplification power ranges:

<i>Model</i>	<b>AS-3</b>	<b>AS-5</b>	<b>AS-S10</b>
<i>Frequency Range</i>	110-20kHz	80-20kHz	45-250Hz
<i>Recommended Power Amplifier</i>	60 to 120W	200 to 400W	800 to 1600W



The use of low power amplifiers, when used at their maximum capabilities, may induce heavily distorted signals such as square sines. Those signals can lead to the destruction of the loudspeaker components.

## X-over

AS series speakers have been designed to bring high quality sound when used with most of the market's amplifiers and signal processors that meet the specifications given and recommended by FrenchFlair Audio. In order to respect the frequency ranges for each speaker and constitute complete sound systems, please find below the recommended X-over frequencies :

<i>Recommended cut-off frequencies</i>	<i>low frequencies</i> → <i>X-over</i> → <i>High frequencies</i>	
	<i>high-pass</i>	<i>Low-pass high-pass</i>
<b>AS-3</b>	-	110Hz
<b>AS-3 with AS-S10</b>	45Hz	130Hz (>24dB/oct)
<b>AS-5</b>	-	80Hz – 120 Hz *
<b>AS-5 with AS-S10</b>	45Hz	110Hz (>24dB/oct)

\* - 80 Hz is suitable when AS-5 is employed without AS-S10 for max power 200 W

- 120 Hz is suitable when AS-5 is employed with AS-S10 for max power 400 W.

# Equalization

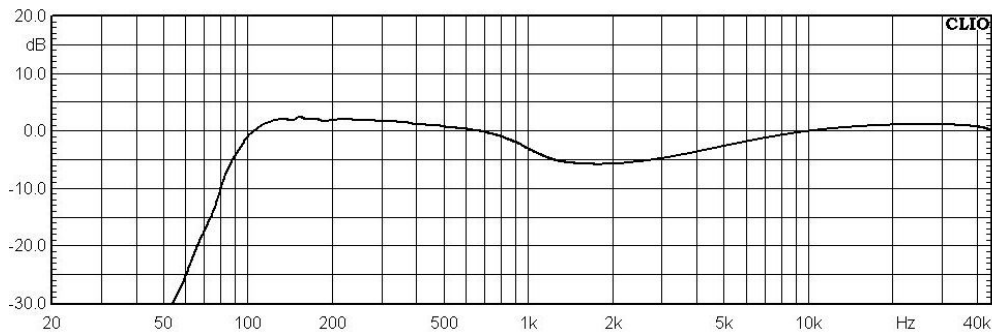
The following suggested equalizations result from listening tests and electroacoustic measurements. They are meant to cover a wide range of applications and make the speakers suitable for all sorts of musical and vocal materials.

The suggested equalization are to be put in place in complement to the X-over frequencies mentioned above.

## AS-3

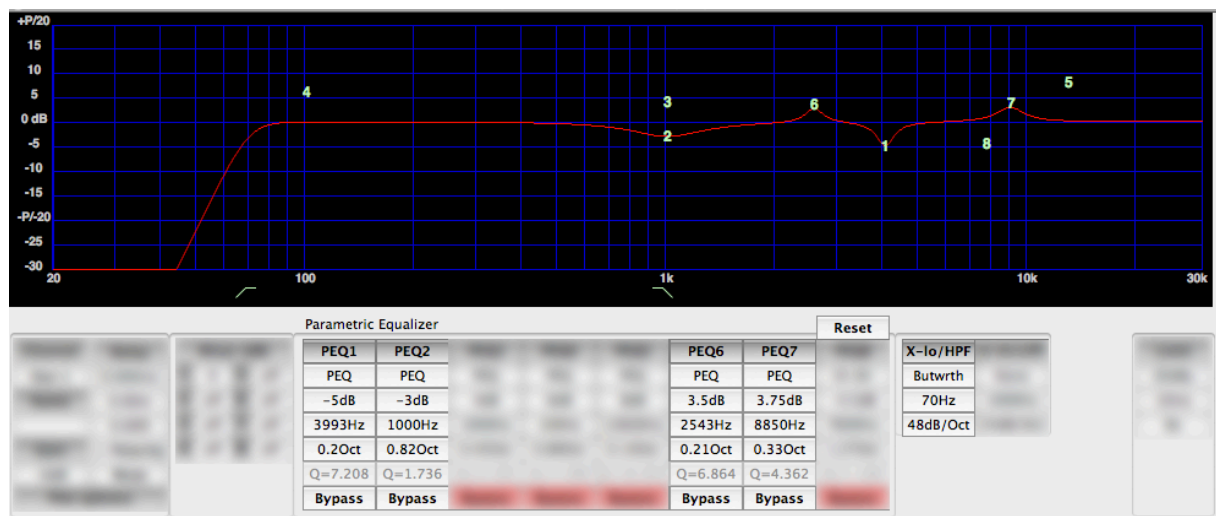
Filter priority	parameters			
high	PEQ	1.9kHz	-6.0dB	BW=3.50 oct/Q=0.40
medium	Low-Shelf	1.0kHz	+2.0dB	BW=1.00 oct/Q=1.41
low	Hi-Shelf	6.8kHz	+1.0dB	BW=2.41 oct/Q=0.53

### Curves :



AS-3 equalization curve – as per the recommendations + Xover (100Hz , 36dB/oct)

## AS-5



AS-5 equalization curve – Watch out ! the Hight pass frequency (80Hz , 48dB/oct) is suitable when AS-5 is employed without AS-S10. See X-over recommended frequencies section.



## **AS-S10**

When used with the AS-3:

- No equalization
- No delay

When used with the AS-5 :

- No equalization
- 0.3ms delay (applied on the AS-S10 subwoofer)



**The recommendations above are subjective indications. FrenchFlair Audio could not be held responsible for low quality sound resulting from other filtering parameters or inadequate to the environment within which the products are being used.**