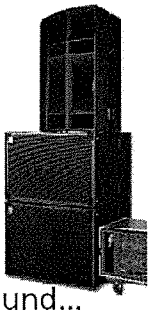
FIR-Setup SA XB36

Auswertung der Messungen vom 18. November 2003



Passion for real sound...

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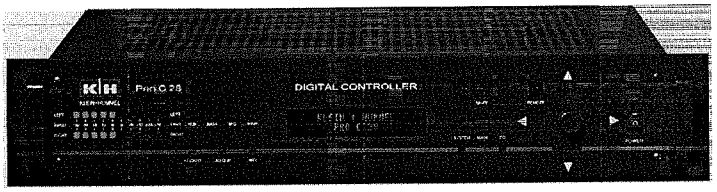

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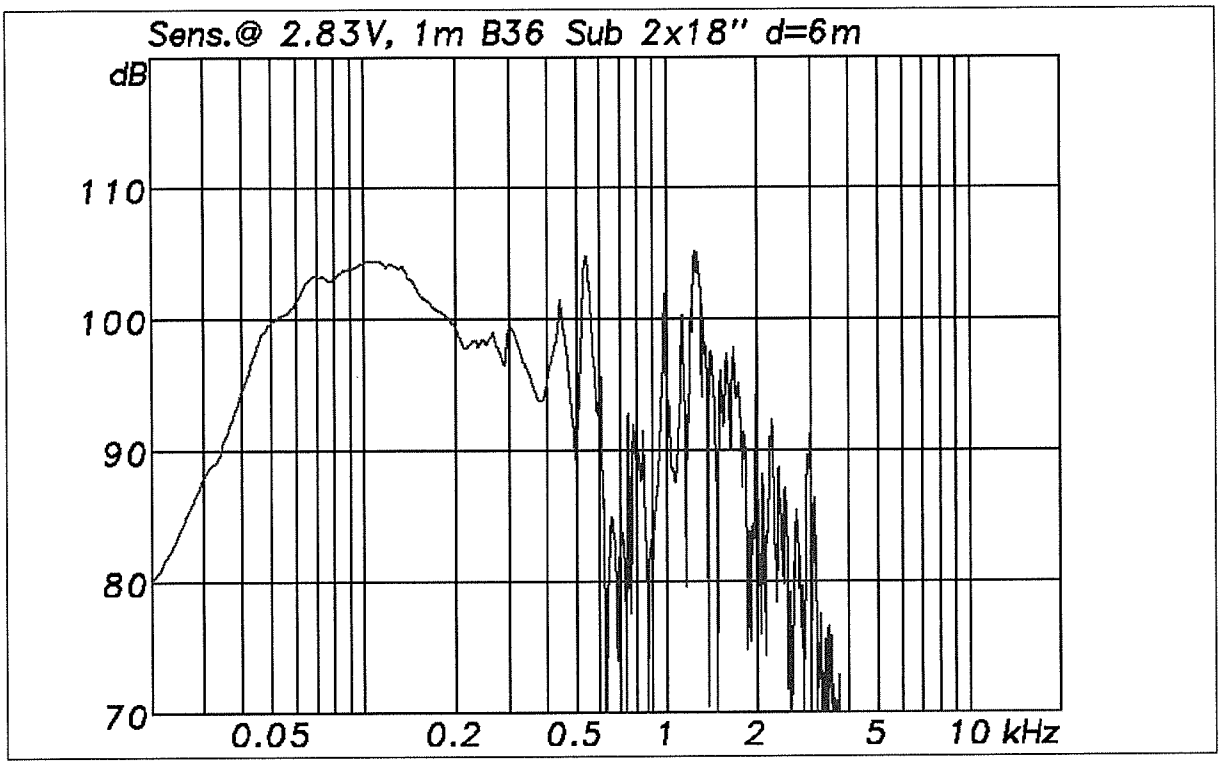

Abbildung 1 **Frequenzgang mit Sensitivity der B36 bezogen auf 2,83V/1m (2W/1m) Messentfernung d=6m ; Vollraumbedingungen**

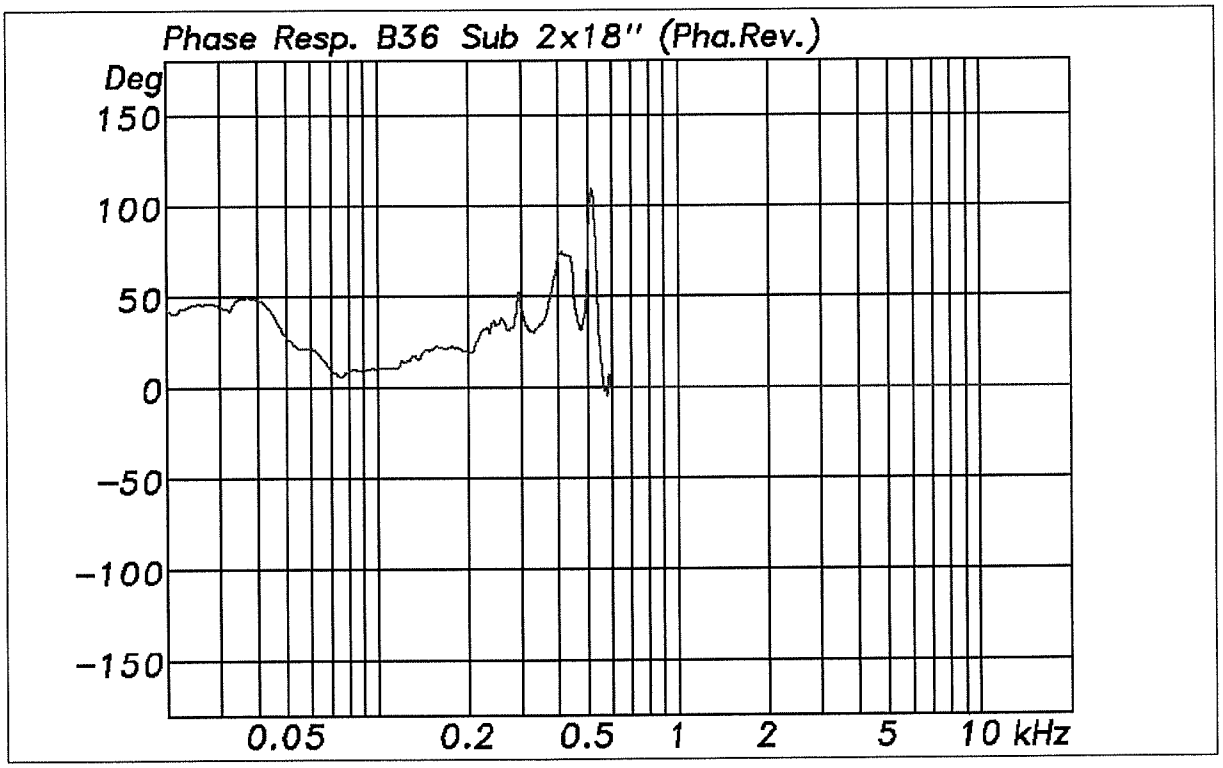

Abbildung 2 **Phasengang der B36 (Darstellung mit invertierter Phase)**

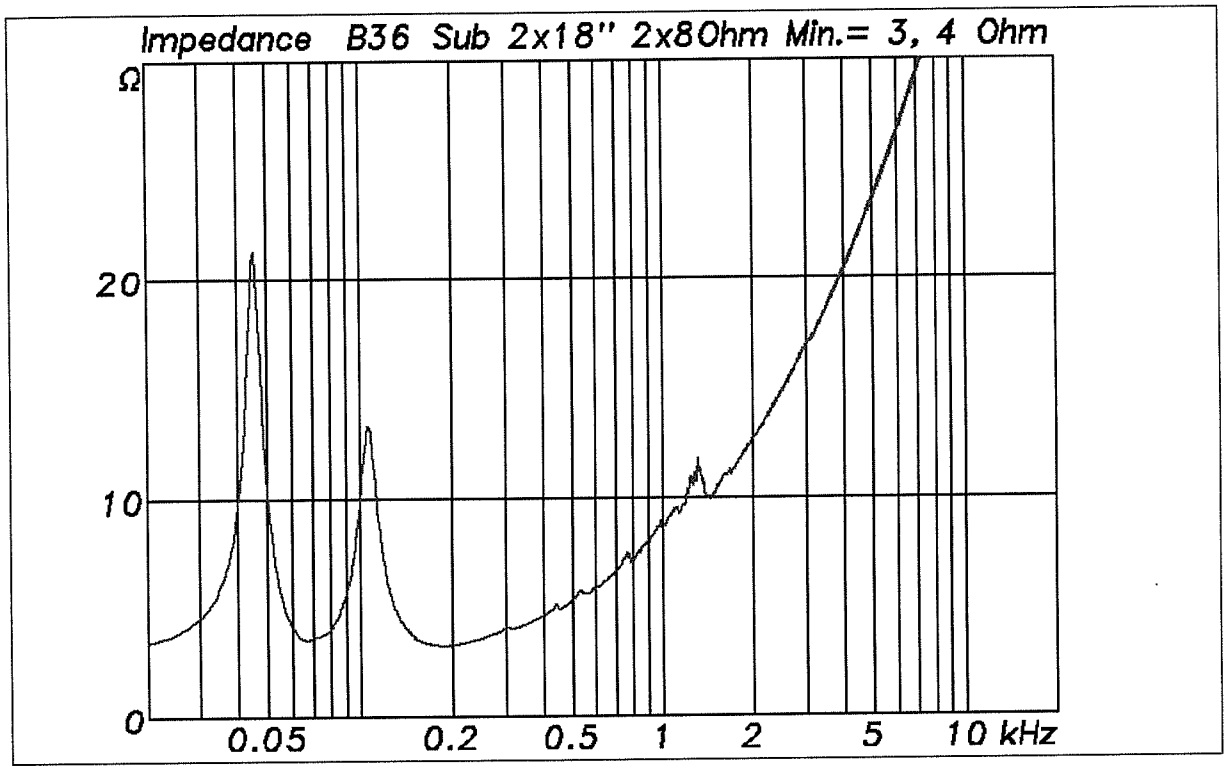

Abbildung 3 Impedanzverlauf der B36

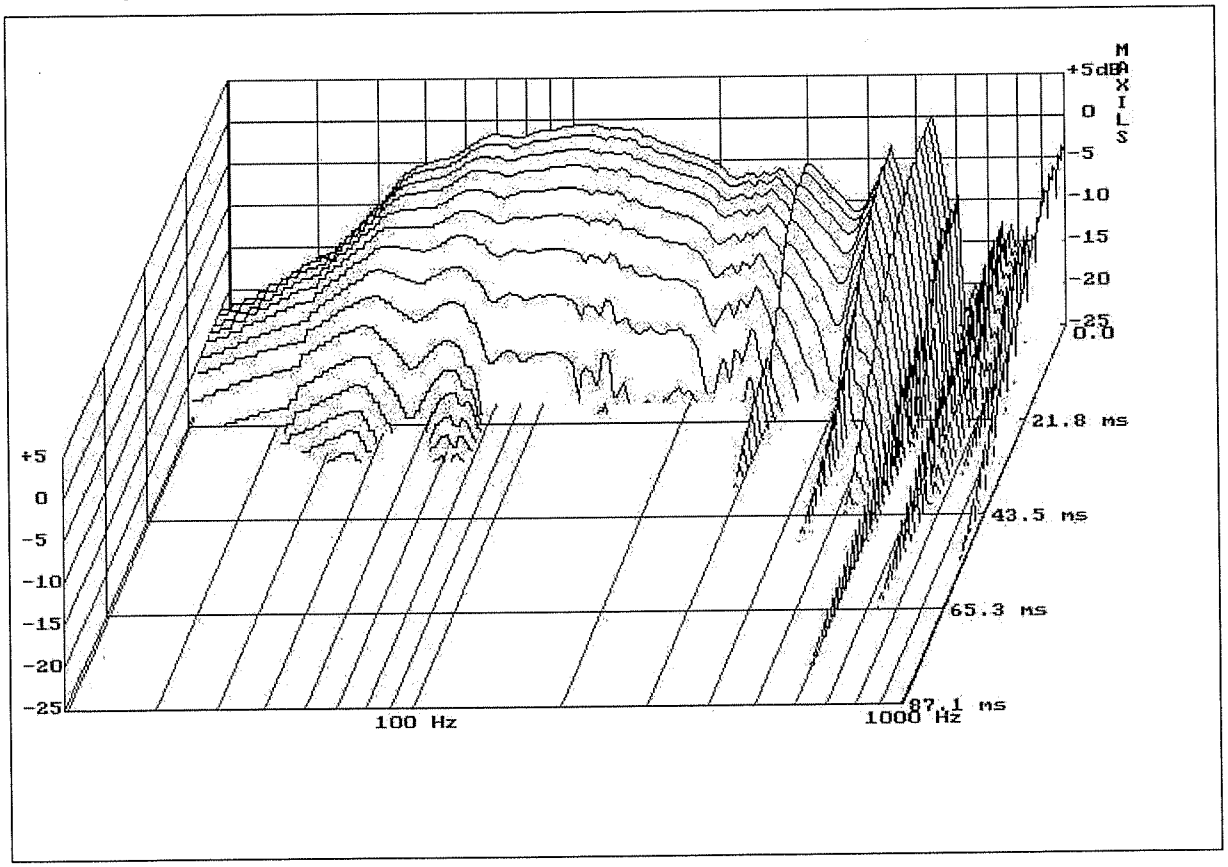

Abbildung 4 Zerfallsspektrum der B36

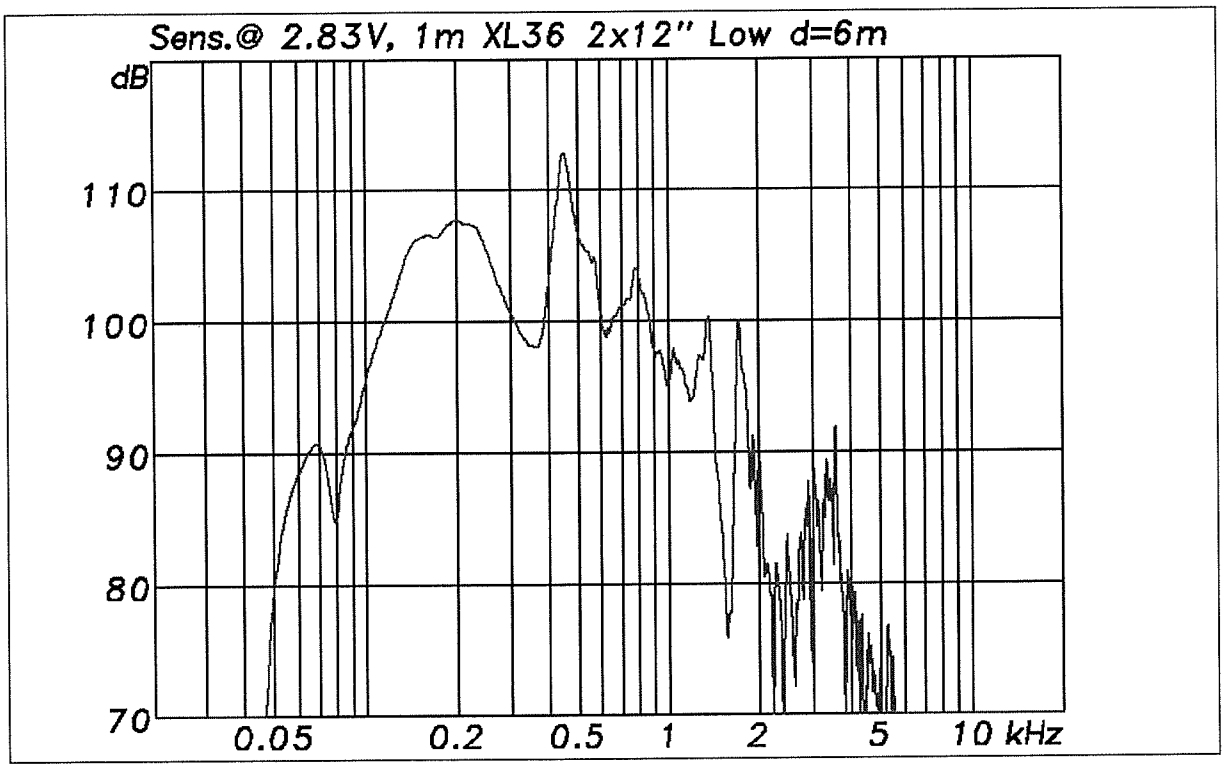

Abbildung 5 **Frequenzgang mit Sensitivity der XL36 Low bezogen auf 2,83V/1m (1W/1m) Messentfernung d=6m ; Vollraumbedingungen**

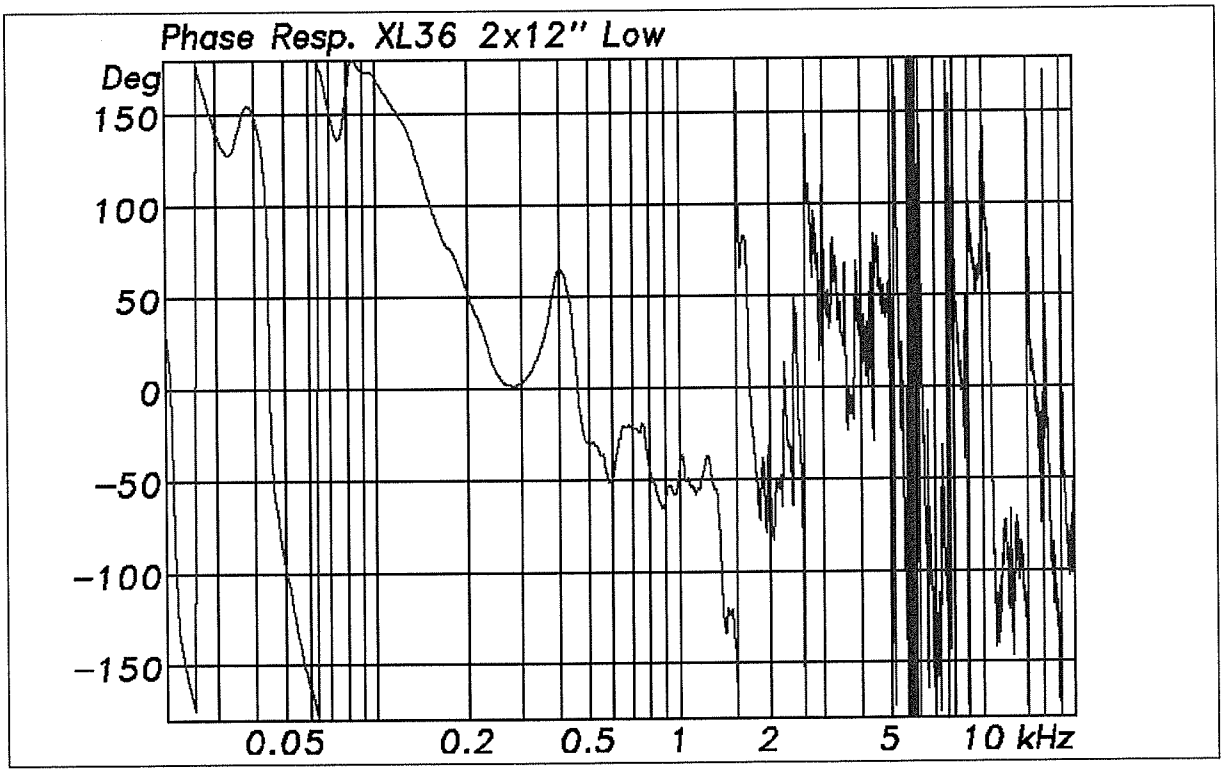

Abbildung 6 **Phasengang der XL36 Low**

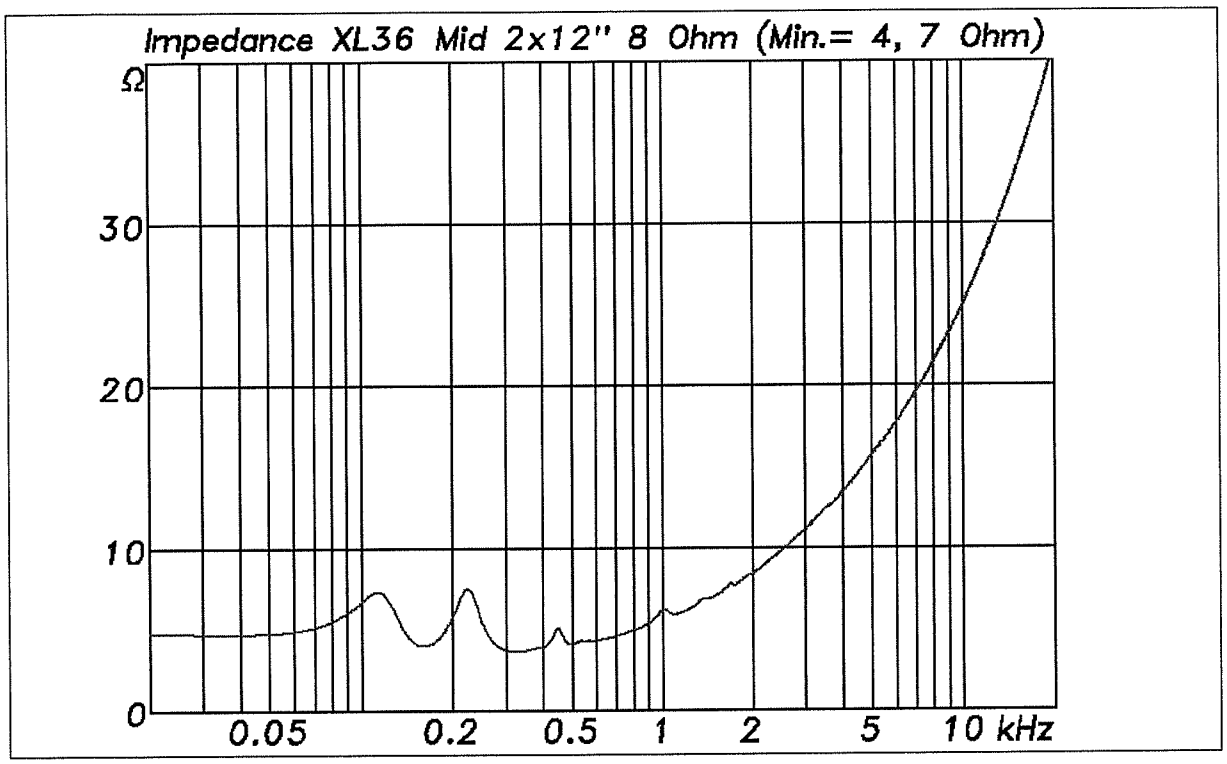

Abbildung 7 Impedanzverlauf der XL36 Low

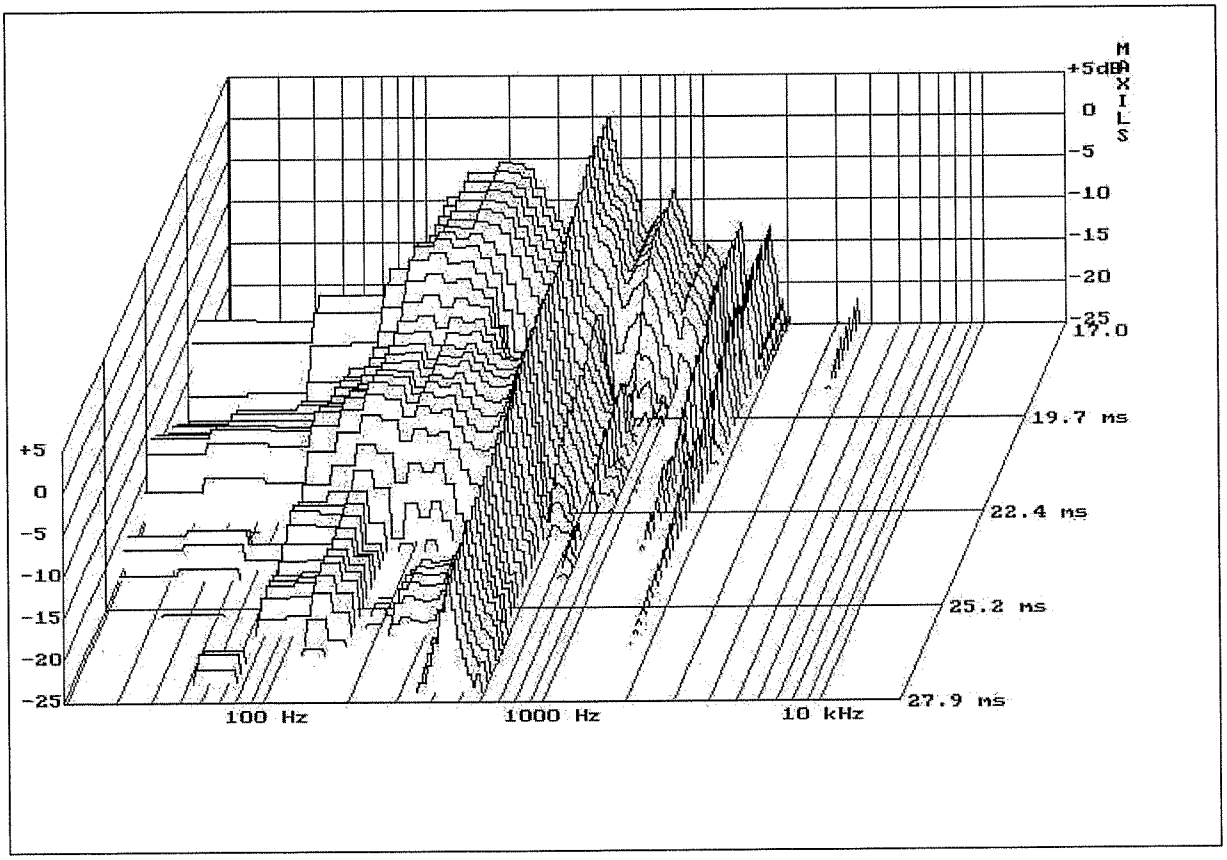

Abbildung 8 Zerfallsspektrum der XL36 Low

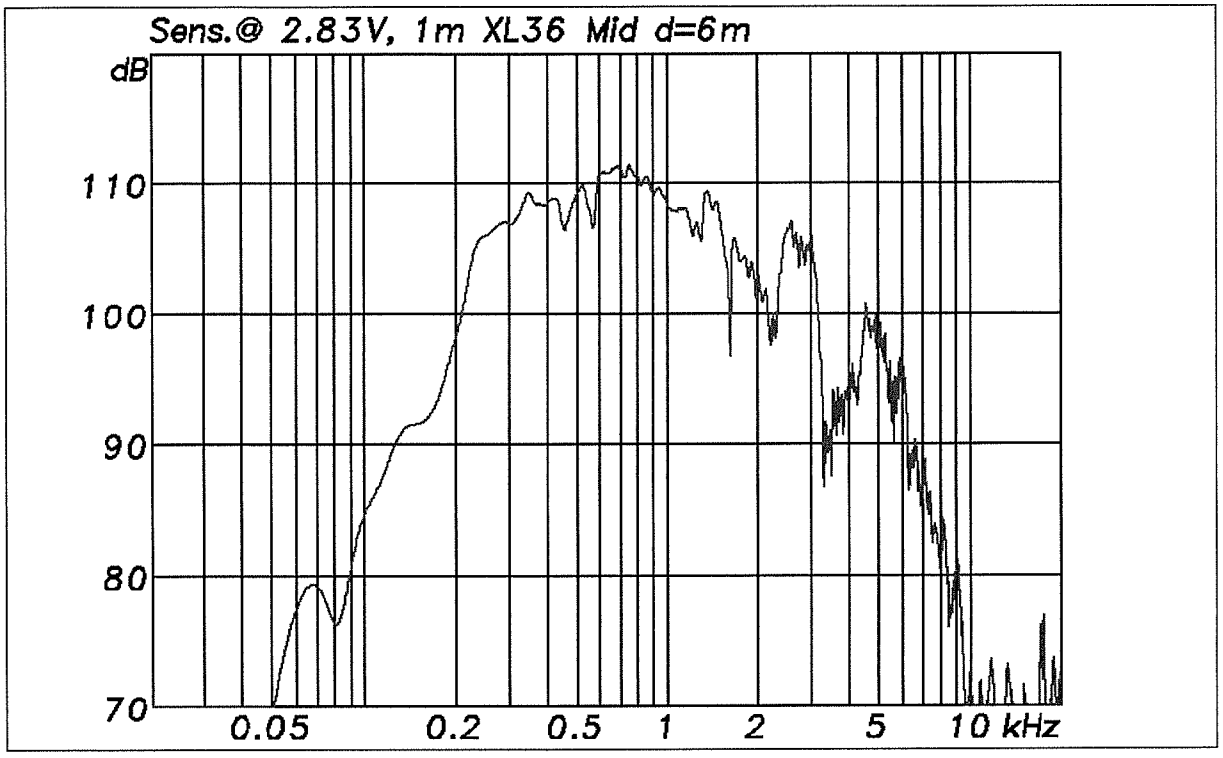

Abbildung 9 **Frequenzgang mit Sensitivity der XL36 Mid bezogen auf 2,83V/1m (1W/1m) Messentfernung d=6m ; Vollraumbedingungen**

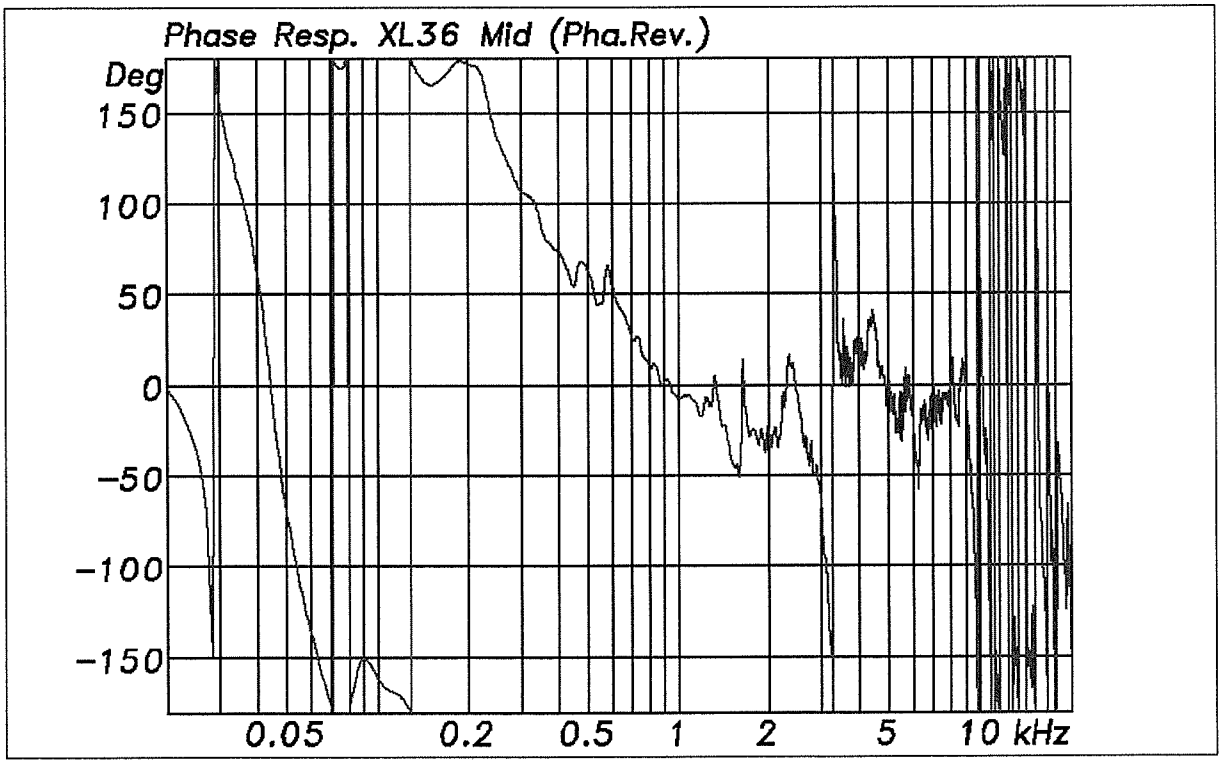

Abbildung 10 **Phasengang der XL36 Mid (Darstellung mit invertierter Phase)**

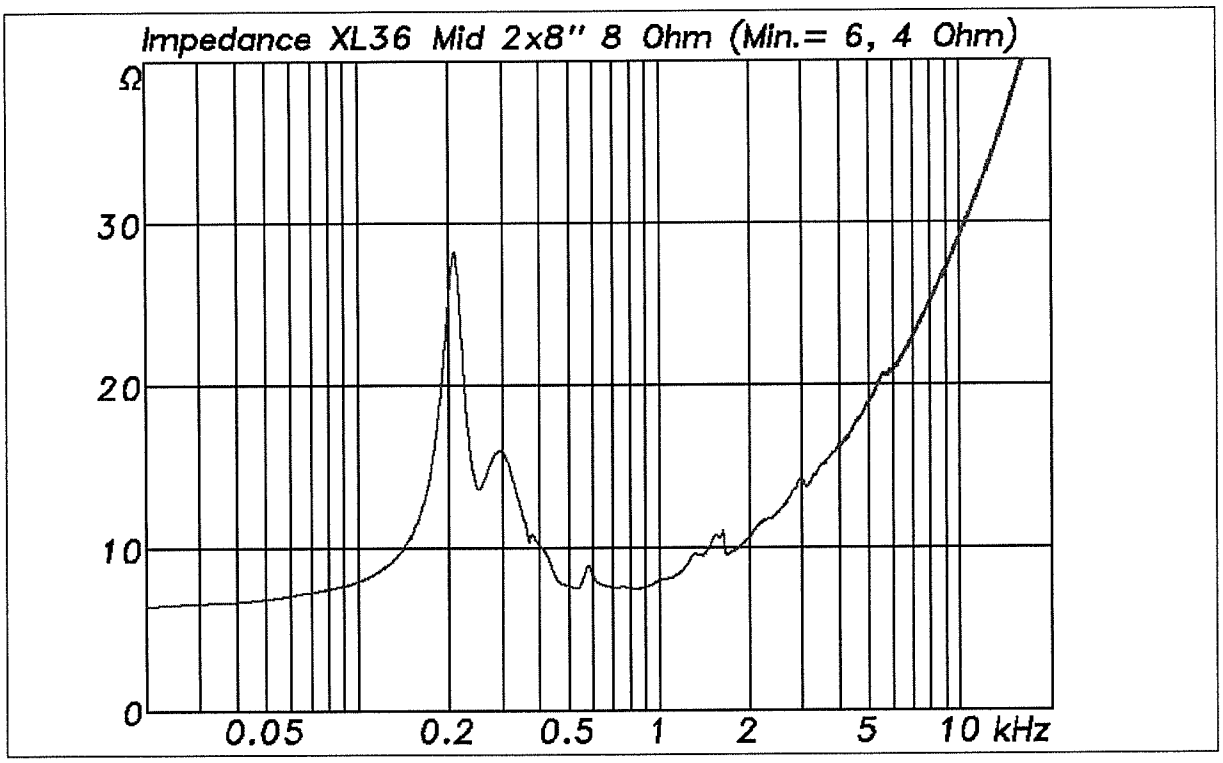

Abbildung 11 Impedanzverlauf der XL36 Mid

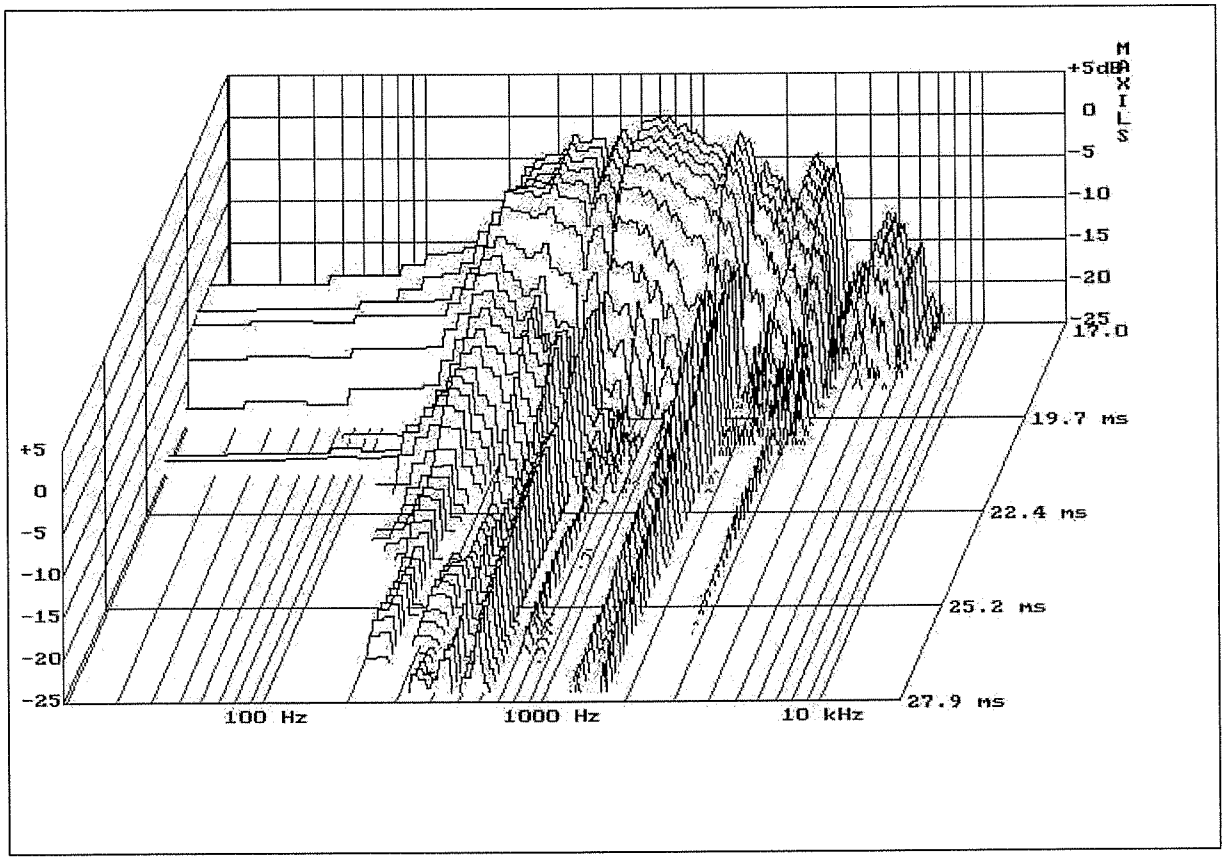

Abbildung 12 Zerfallsspektrum der Mid

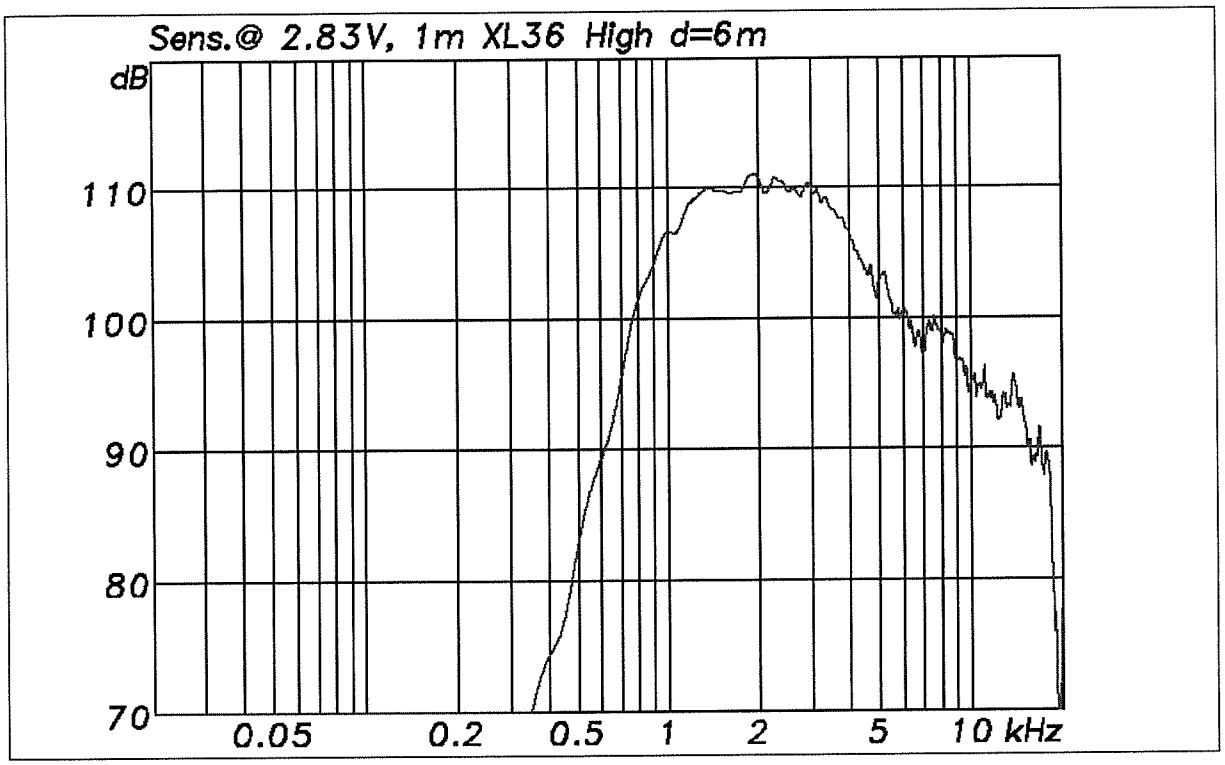

Abbildung 13 **Frequenzgang mit Sensitivity der X36 High bezogen auf 2,83V/1m (1W/1m) Messentfernung d=6m ; Vollraumbedingungen**

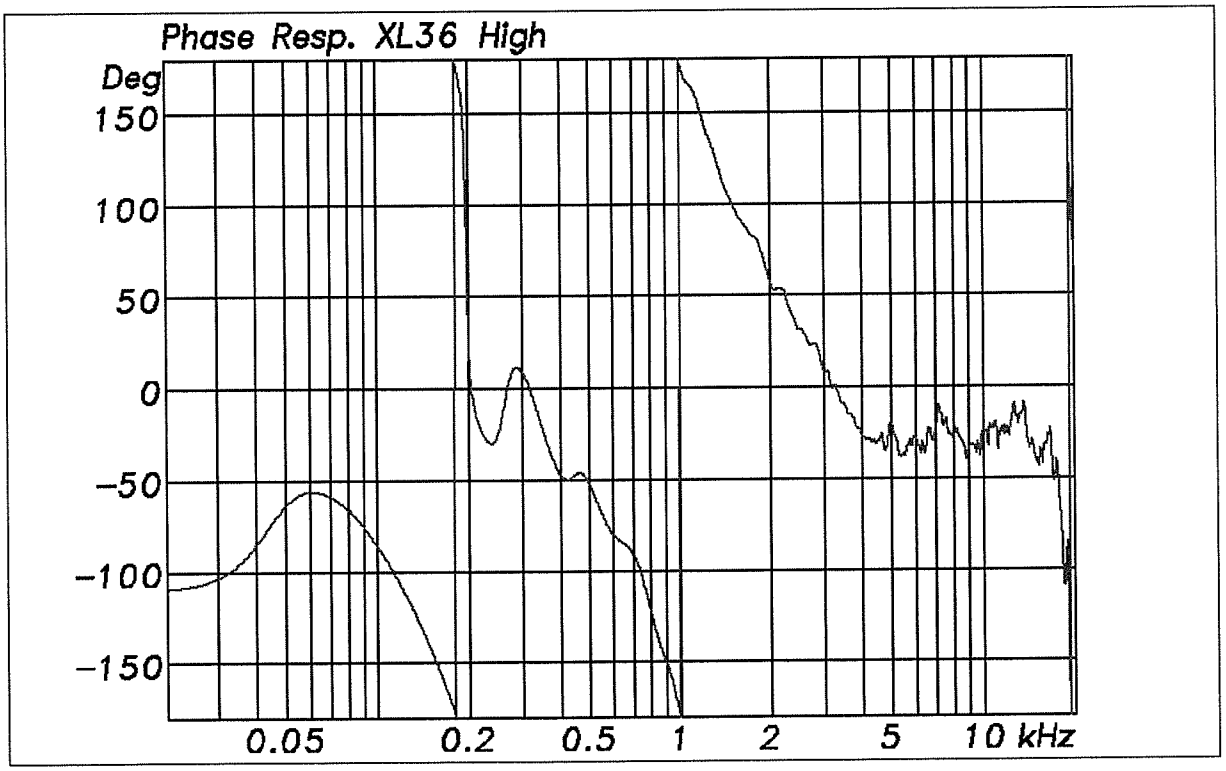

Abbildung 14 **Phasengang der XL36 High**

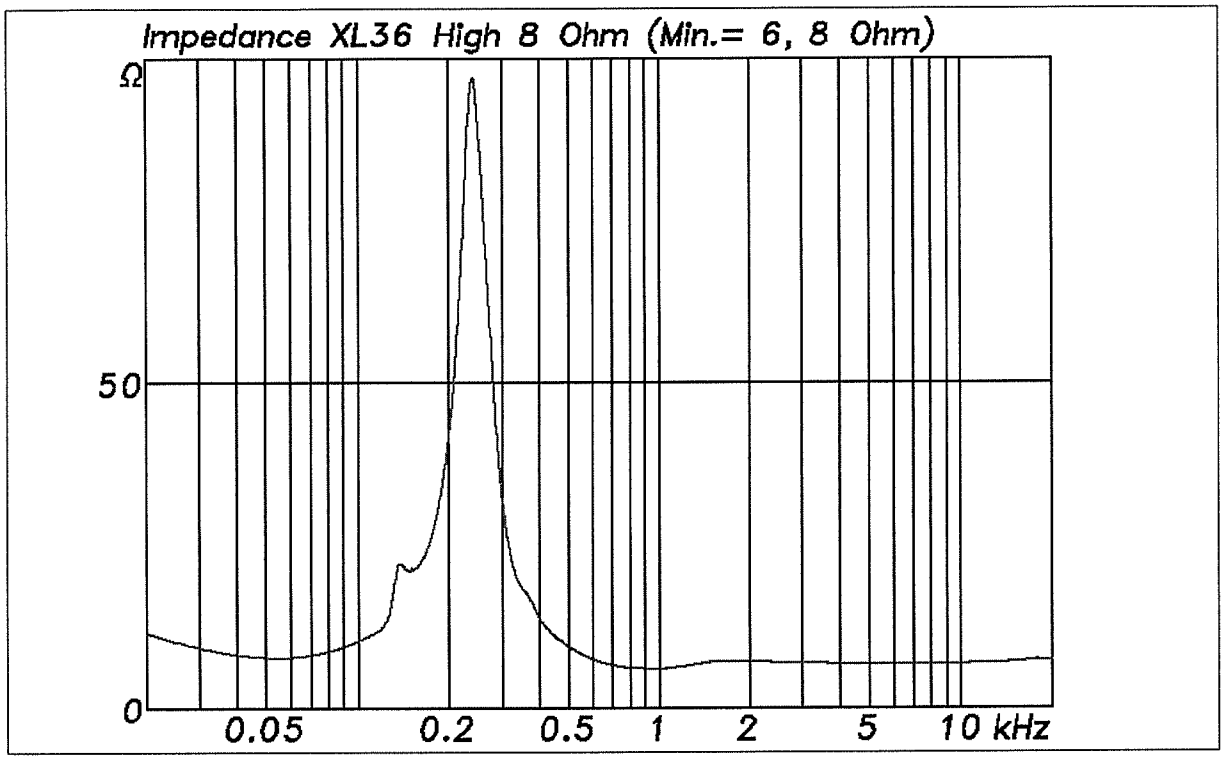

Abbildung 15 Impedanzverlauf der XL36 High

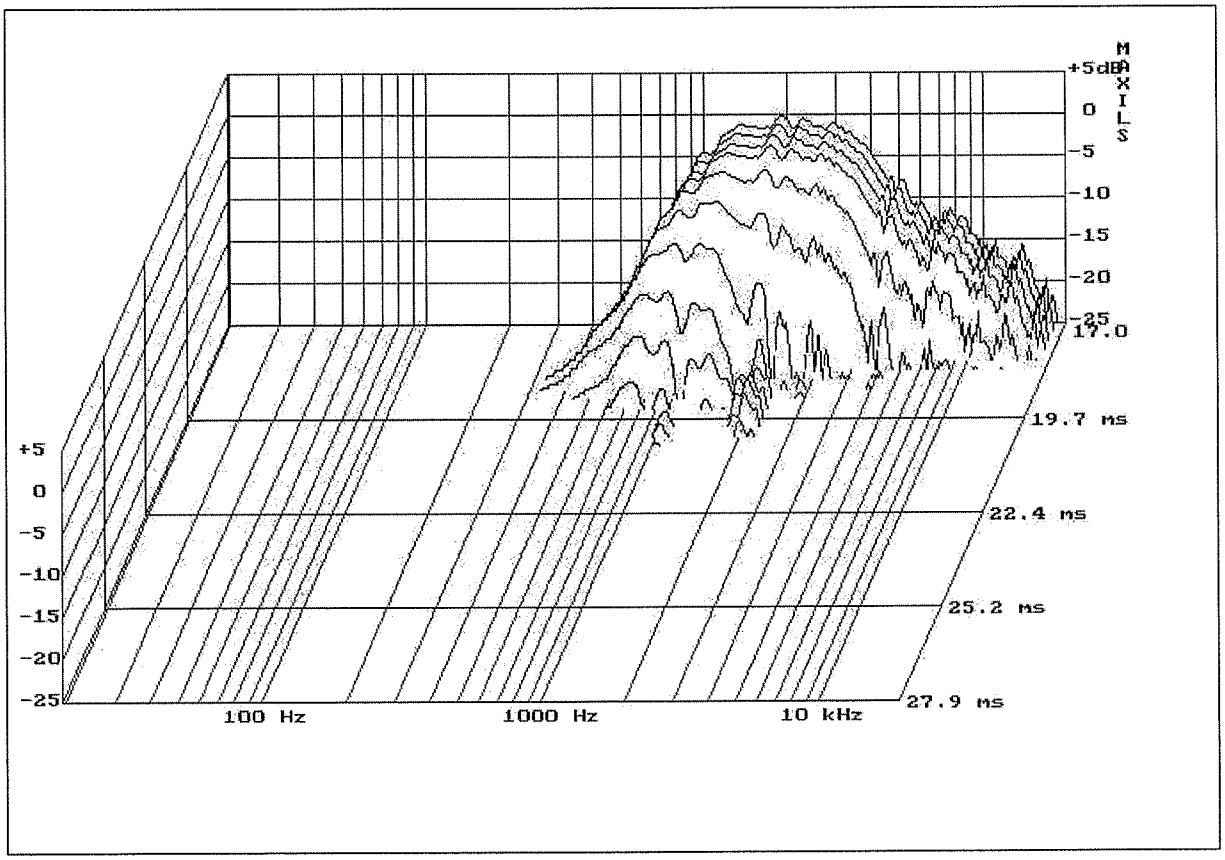

Abbildung 16 Zerfallsspektrum der High

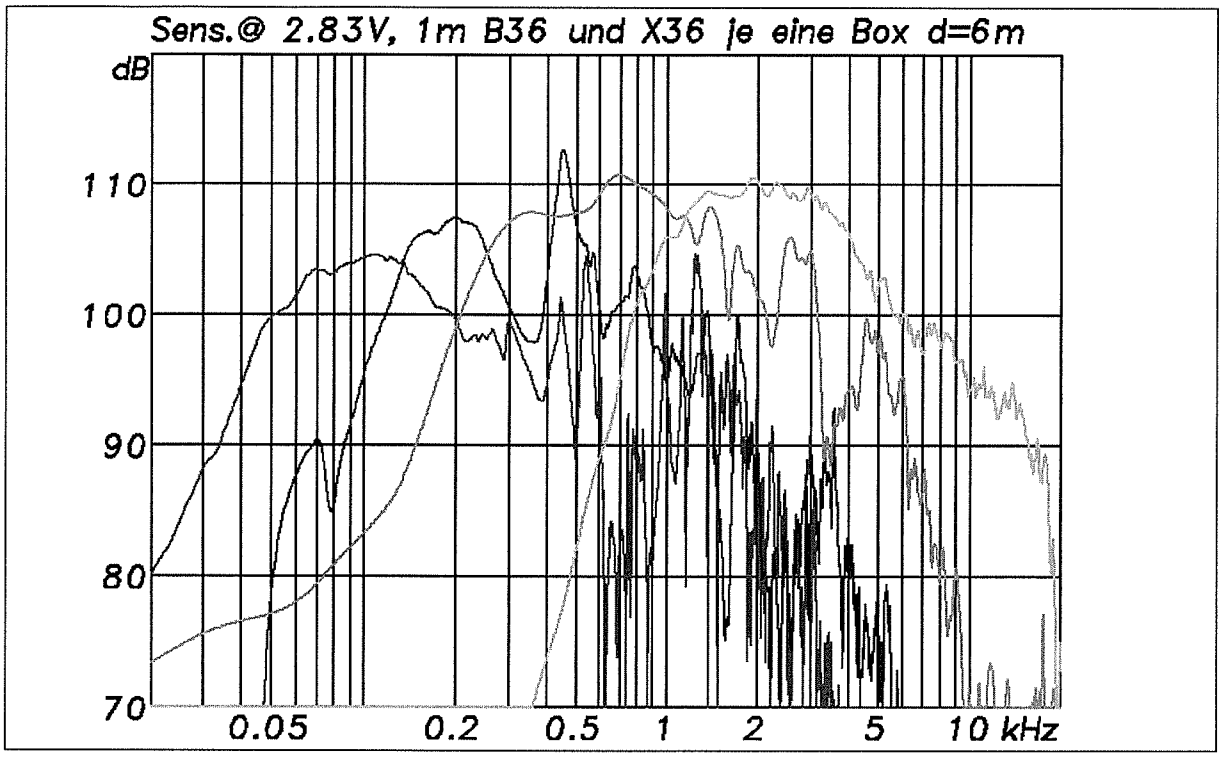

Abbildung 17 Frequenzgänge aller vier Wege für ein einzelnes Stack mit je einer B36 und XL36

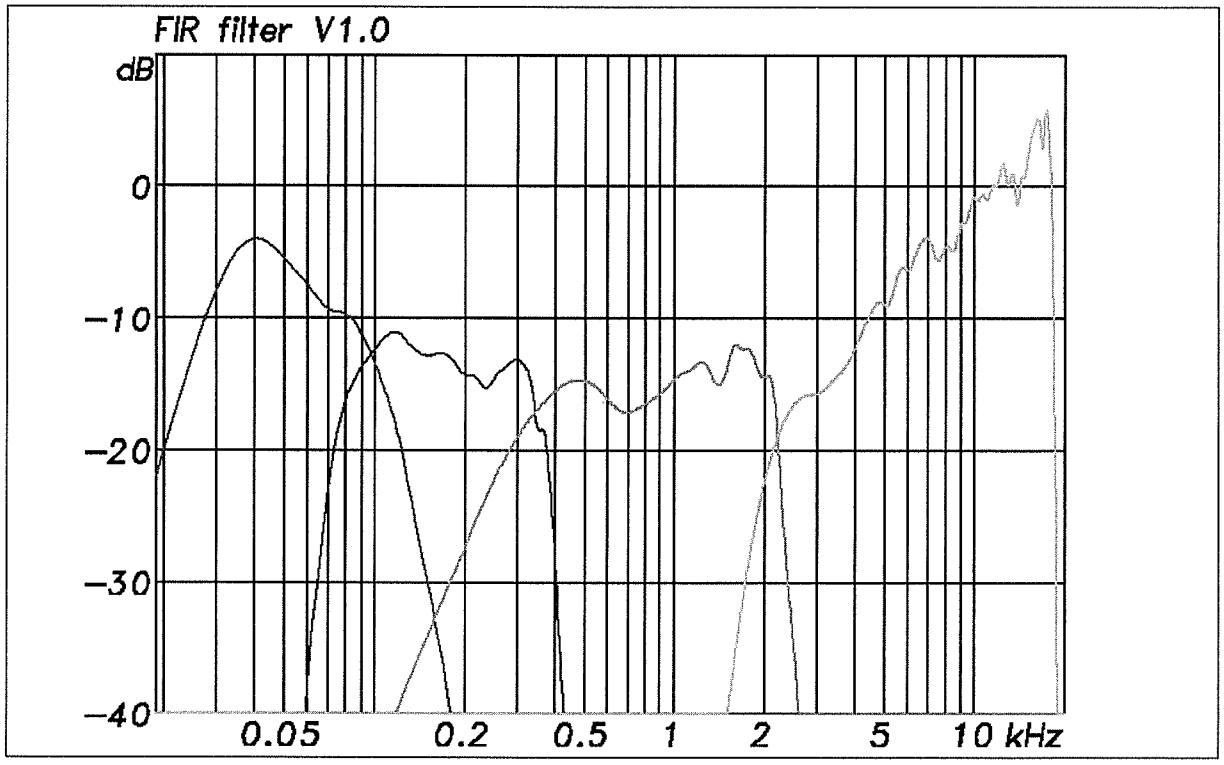

Abbildung 18 Frequenzgänge des Controllers für ein einzelnes Stack

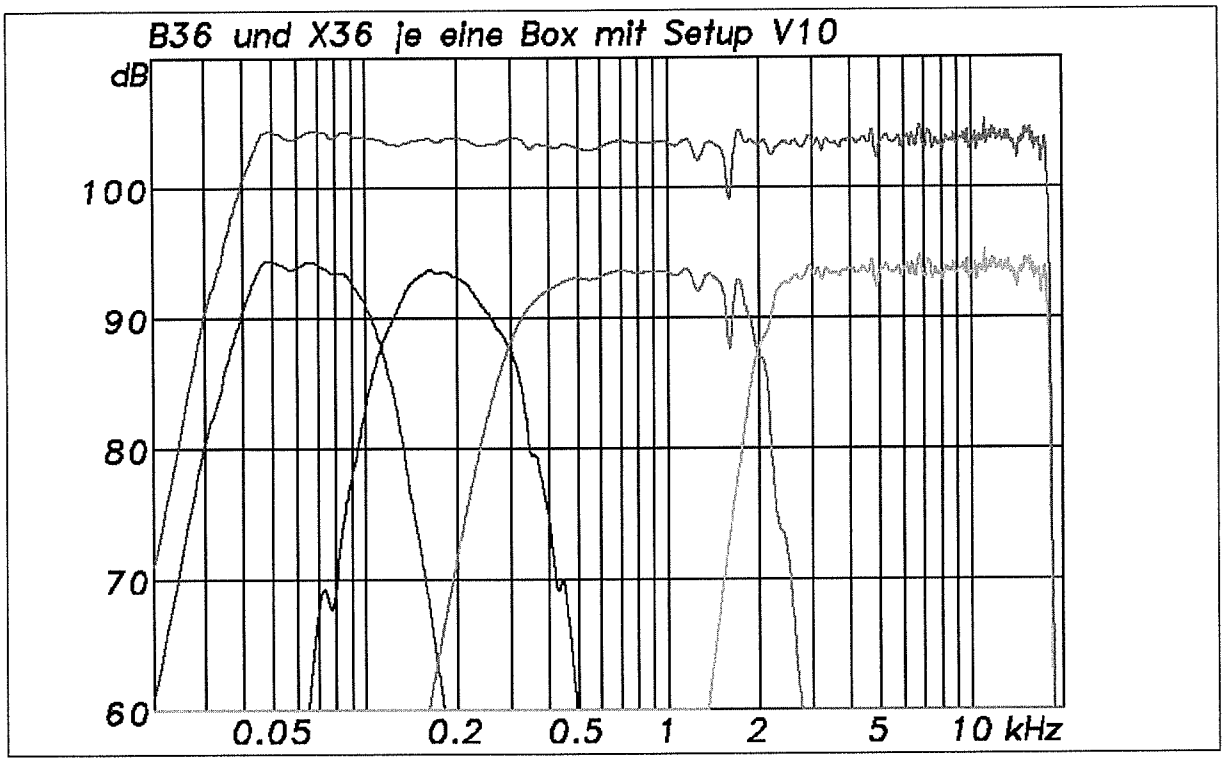

Abbildung 19 Gesamtergebnis für ein einzelnes Stack aus B36 mit XL36 und Controller Setup V1.0

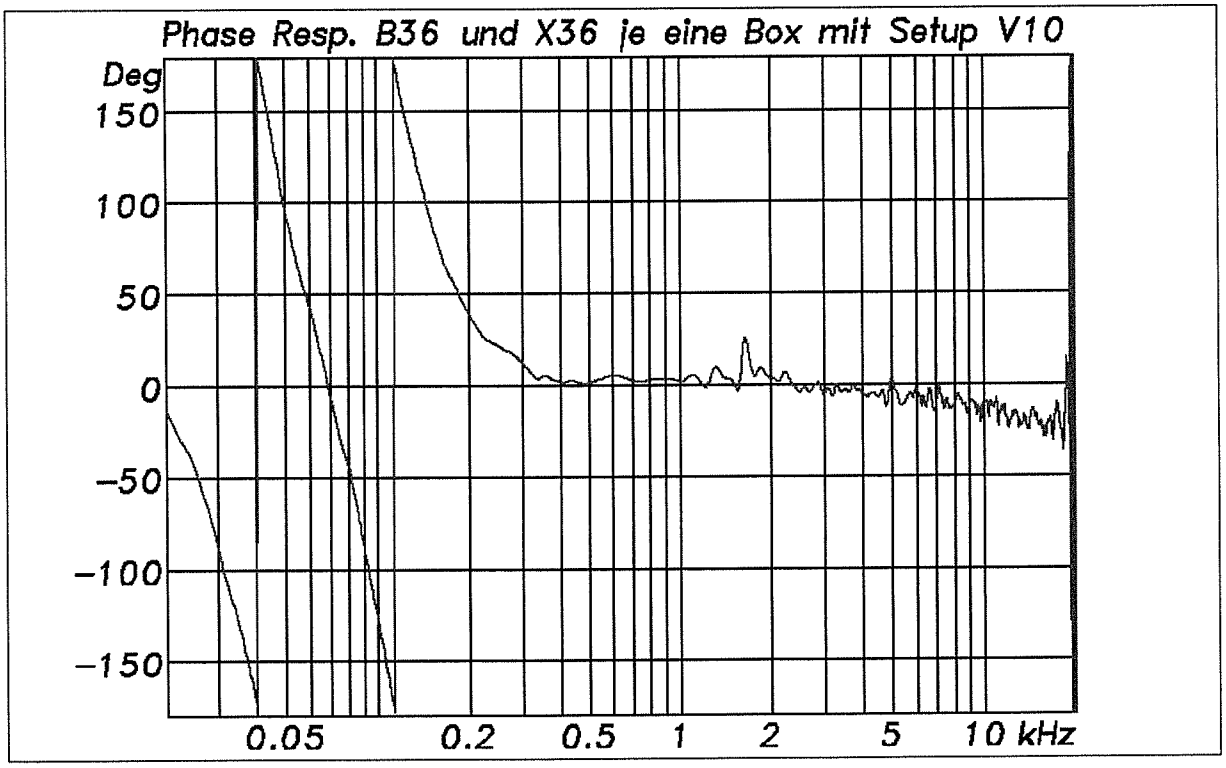

Abbildung 20 Phasengang zur Summenkurve aus Abbildung 19

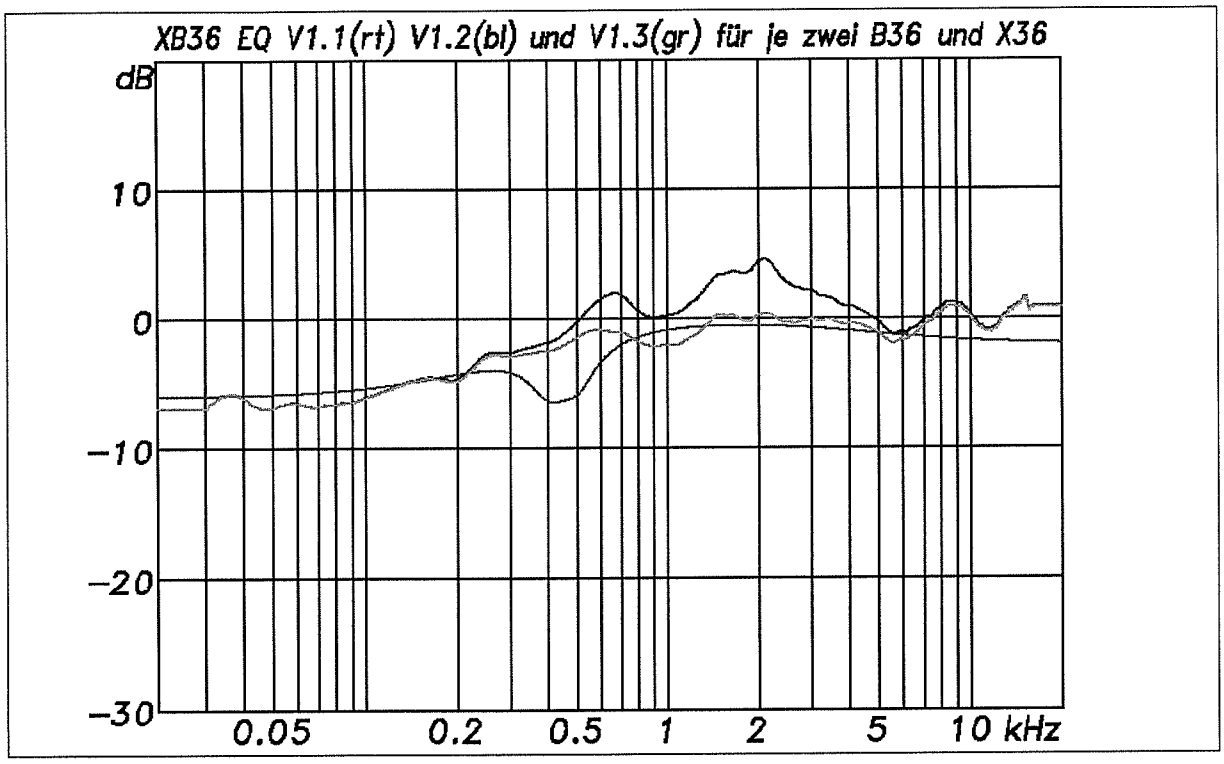

Abbildung 21 **EQ Kurven für ein Stack mit je zwei B36 und XL36**
rot: V1.1 (im Controller Setup V1.1)
blau: V1.2 (im Controller Setup V1.2)
grün: V1.3 (im Controller Setup V1.3)

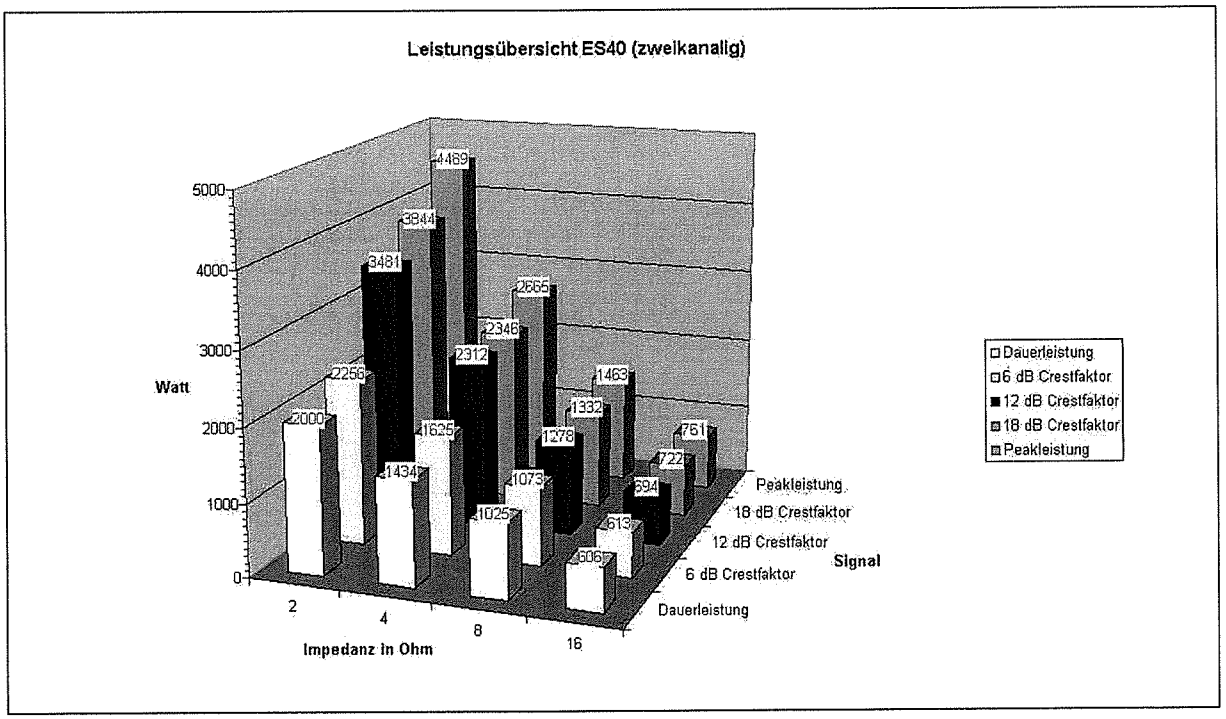

Abbildung 22 **Leistungsübersicht für die ES40 Endstufe (Ausgangswerte für die Limitereinstellung)**
Gain: 33dB

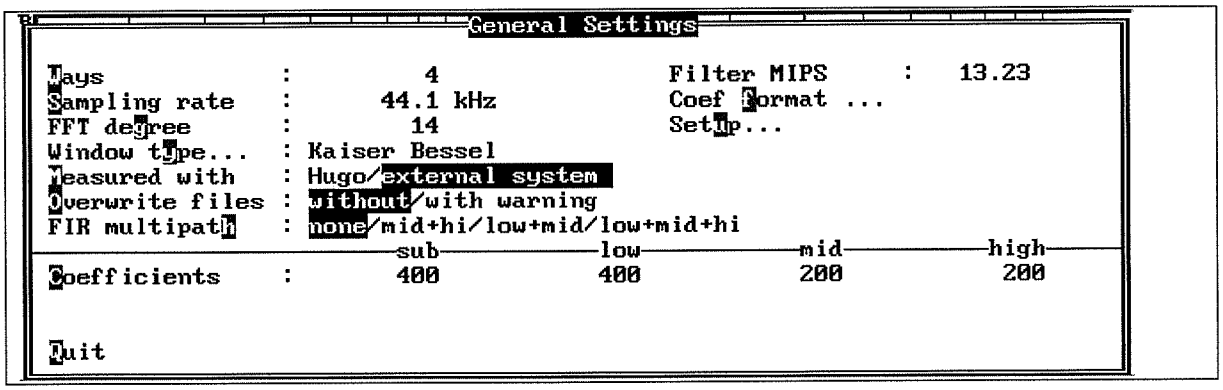

Abbildung 23 Controller Setup in MF Teil 1/5

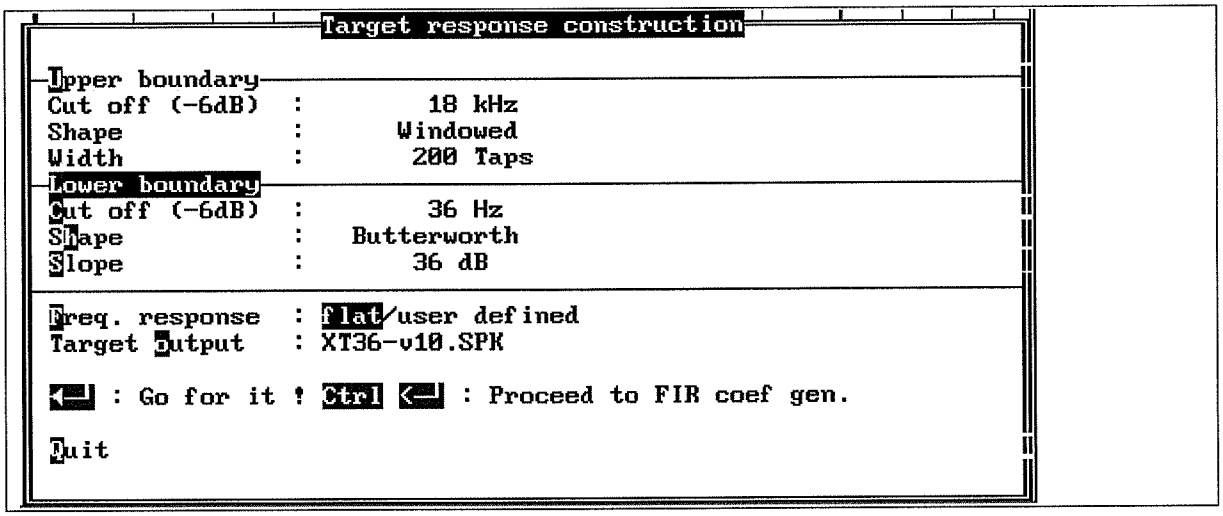

Abbildung 24 Controller Setup in MF Teil 2/5

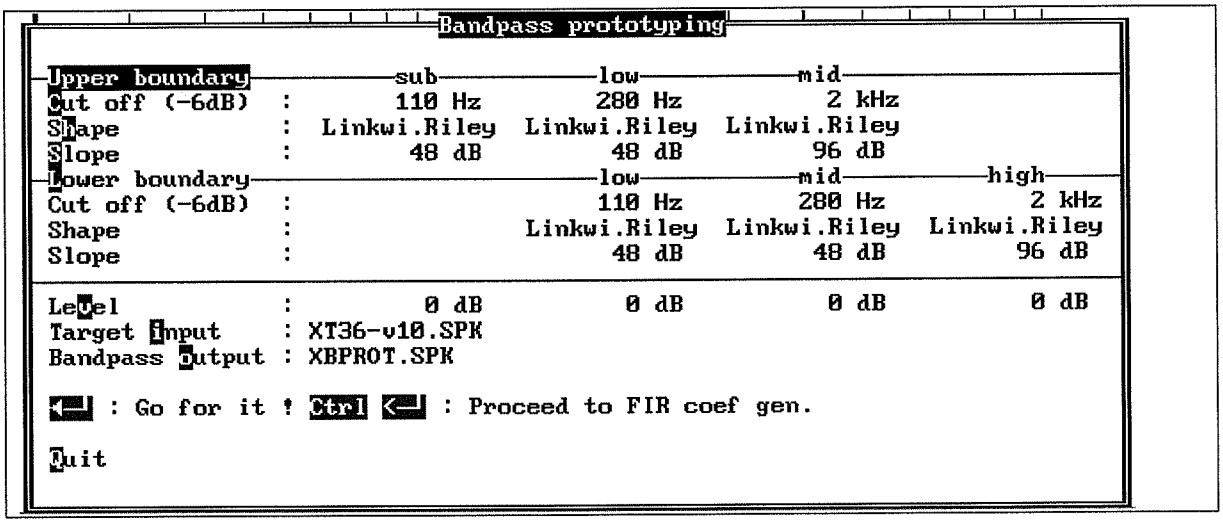

Abbildung 25 Controller Setup in MF Teil 3/5

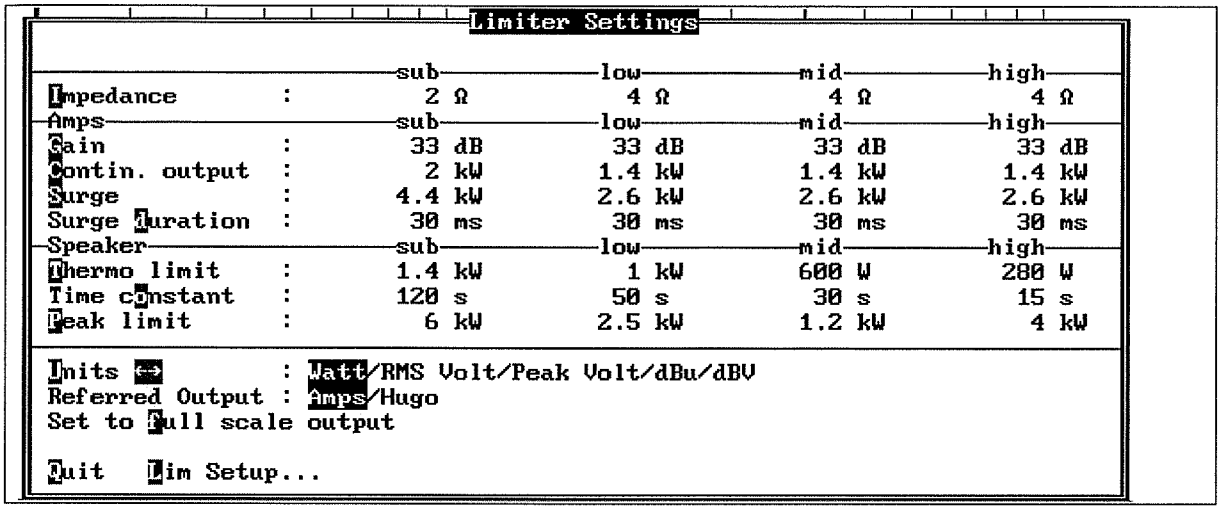

Abbildung 26 Controller Setup in MF Teil 4/5

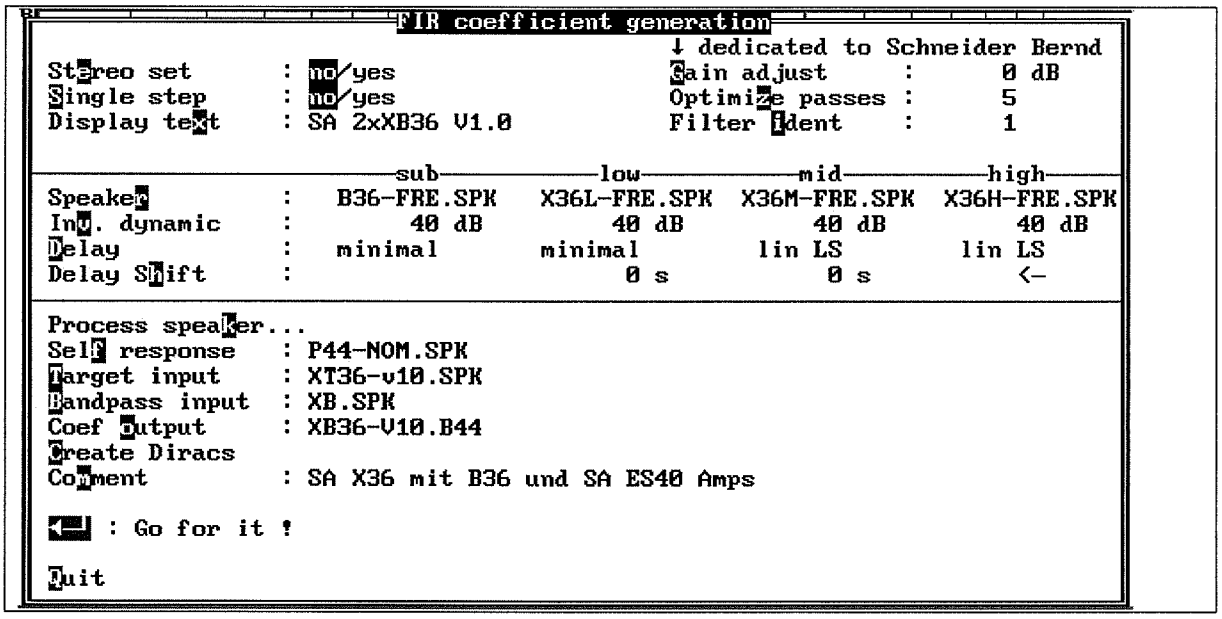

Abbildung 27 Controller Setup in MF Teil 5/5

Erstellte Setups für den ProC28:

File Name	Speaker	Sample Rate	EQ Setup
XB36-V10.B44	1x B36 + 1x XL36	44,1 kHz	neutral
XB36-V10.B48	1x B36 + 1x XL36	48,0 kHz	neutral
XB36-V11.B44	2x B36 + 2x XL36	44,1 kHz	V 1.1
XB36-V11.B48	2x B36 + 2x XL36	48,0 kHz	V 1.1
XB36-V12.B44	2x B36 + 2x XL36	44,1 kHz	V 1.2
XB36-V12.B48	2x B36 + 2x XL36	48,0 kHz	V 1.2
XB36-V13.B44	2x B36 + 2x XL36	44,1 kHz	V 1.3
XB36-V13.B48	2x B36 + 2x XL36	48,0 kHz	V 1.3

Controller Reset mit gedrückter Enter Taste beim Einschalten.
Dann F2= Initialize.

Setups neu laden mit:

LOADPROC ‚File Name'

LOADPROC muss insgesamt 8x ausgeführt werden mit den Dateien in der oben aufgeführten Reihenfolge.

Also wie folgt:

LOADPROC XB36-V10.B44
LOADPROC XB36-V10.B48
LOADPROC XB36-V11.B44
LOADPROC XB36-V11.B48
LOADPROC XB36-V12.B44
LOADPROC XB36-V12.B48
LOADPROC XB36-V13.B44
LOADPROC XB36-V13.B48

Rene van der laan

Van: Jos van Velzen
Verzonden: maandag 24 november 2003 17:13
Aan: Gerard Vermeulen; Rene van der laan
CC: Roland de Groot
Onderwerp: FW: specs

Test results ter info.

Jos
-----Oorspronkelijk bericht-----
Van: Jürgen Desch [mailto:JDesch@Desch-Audio.com]
Verzonden: maandag 24 november 2003 14:20
Aan: Jos van Velzen
Onderwerp: AW: specs

Dear Jos,

in attachment I will send you all the mesurements we did on the XL-36 and B36 system, therefor you can see the components curve, the directivity and after we have taken all the data in the computer we simulate the best X-Over points. This are much more complex measurement than a company normaly is doing because who has a absolutly resonance free room (not many companys) therfor you must note that on most measurements you still have ground reflections as a result of the measurement inviroments.
The dip at 250Hz is slidly more than 10dB, thats one of the reason why we went out of the bandwith 48dB/octave. The reason on the HF is also very simple to answer, the performance of the 8" is in the frequency range untill 2KHz smoother that the ribbon, because of a peak at 1,8KHz I did notice this fact on my listening set-up and we measured it in the same way, the sound is much better in the way we have it now because it gives the whole system much more efficency. The slope at 2.1KHz is very narrow 96dB/Octave there is no processor in the whole market that can doing only ours.
In the last measurements you will see the detailed processor curve that makes the frequency response nearly flat as it is now, yes its no magic its the only extremly good electronic and perfect measurements. Now you know why this controller is totaly different to the rest on the market.
The dip at 1.5KHz is about 2dB and based on the 8" component, but it has absolulty nothink to say, in other words its either a advantage than disadvantage.

Please I need from you very soon by mail the SA Logo because than I can finish the specs on the SA X-1 processor.

The paint we using on the HL-90 is not good, its better than the paint that you are using but Gerald should have a look for a new paint, at least for the Live Market.

To finish the XB-36 System we have to make more parts,
1. We need a new connectorpanal when we sell the system with X-1 controller, based on a Multipin In/Out as 24pin because we coming with 8 lines from FOH and have 4 lines each side of the stage L/R. Therfor we should also selling the multicables to our clients to using that

2. We need one Output connectorpanal the same 24pin connector we using for the ampracks for the backside of the X1 Processorcase

3. We need one more rigging part to make the flying of the system usable, with the parts that you are deliver at the present its unpractibal to work

with, I will send you a draw abpout it,

If this thinks are done than our system is nearly perfect and very hard to compete.

The idea to make a complete distributor and dealer meeting in Hoorn makes a lot of sense, I would say best time would be mid or end of Febuary because we should have the new brand finsh to show befor messe, that makes the most sense and people are motivated to come and hear new thinks.

Ciao Juergen

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-----Ursprüngliche Nachricht-----
Von: Jos van Velzen [mailto:j.vanvelzen@stageaccompany.com]
Gesendet: Montag, 24. November 2003 13:18
An: jdesch@desch-audio.com
Betreff: specs

Jürgen,

Herewith I have a question about the acoustical figure. Below the 2000Hz you will see a dip. How much is this
and why is there a dip.

Out of earlier data regarding the 12"from Flip it is correct there is a 10dB dip as measured. That is why Flip sets the module
on 250Hz. Secondly the crossover of the ribbon is set on 1500Hz by earlier measurements done by Flip. You will have a crossover
point at 2100Hz slightly after the dip.

Rene our engineer is curious about this.

Furthermore I would like to know if we can change names and some items in your PdF file.

Re. the paint of the systeem. Gerard mentioned to me that many paint specialists came to SA to discuss
what will be the best paint for use. That why finally they choose for this with the specific structure.
Anyway the used paint is not of enough quality, I agree with you. I also took note of many scratches on
your HL90 but I do not know how long this cabinet is already in use. If you feel this quality is OK for
rental companies please let me know what type of paint this is. We can use it as well.

Take care.
Jos

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