

# Preset 23: Neutral - F36-67CHR250DOGN

Trinnov Audio

Amethyst 70 (SRPID 8388678)

Version 4.2.5.1+

(+[51764c6df1db] / +[a48edefa82c3] / #[8bbc2e81cf47#])

Calibration microphone: v8-212

Parameters: `parameters.xml`

February 23, 2020

## Contents

<b>1</b>	<b>Settings</b>	<b>2</b>
<b>2</b>	<b>Speaker layout</b>	<b>3</b>
2.1	Top view representation . . . . .	3
2.2	Speaker Information . . . . .	3
<b>3</b>	<b>Speaker 1</b>	<b>4</b>
3.1	Impulse response . . . . .	4
3.2	Frequency response . . . . .	4
3.3	Phase response . . . . .	4
<b>4</b>	<b>Speaker 2</b>	<b>5</b>
4.1	Impulse response . . . . .	5
4.2	Frequency response . . . . .	5
4.3	Phase response . . . . .	5

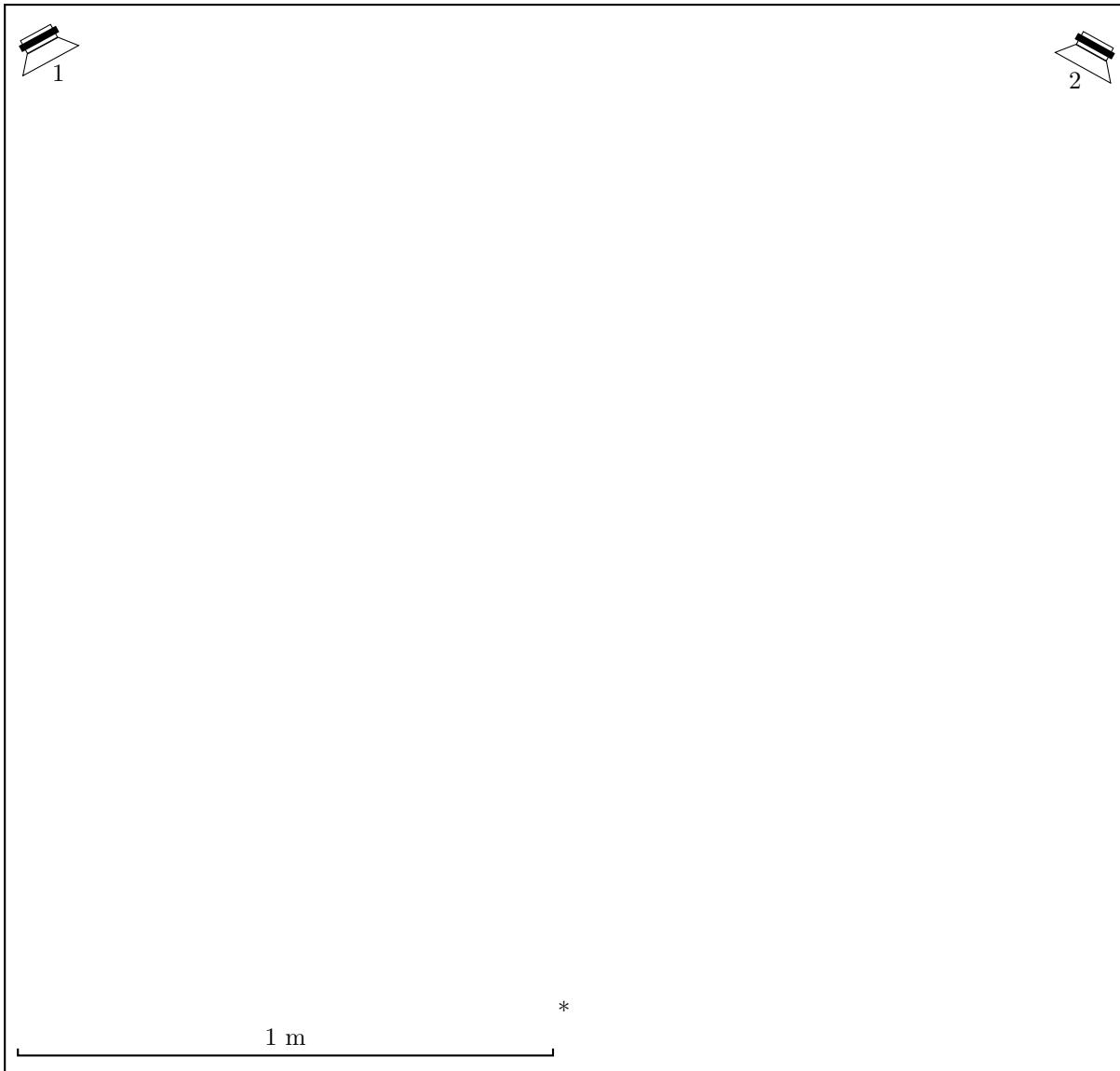
# 1 Settings

<b>General settings</b>	Sample rate	48000
<b>Acoustics correction settings</b>	Optimize Maximum Boost Maximum Attenuation Quantity of Early Reflections Resolution of Energy Response	Amplitude + Phase 6 dB -10 dB 3 cycles 1/3 oct
<b>Display settings</b>	Display smoothing	1/3 oct
<b>Front and surround speaker options</b>	Early reflections correction on Energy response correction on Delay alignment on Add decorrelation on Remapping on	front & surround front & surround front & surround no speaker front & surround
<b>Advanced acoustic correction settings</b>	Use filters High-Pass filter frequency	FIR+IIR 15 Hz
<b>Calibration settings</b>	Threshold for response begin detect Minimum acceptable crest factor Min acceptable crest factor for sub Maximum number of measurements	-15 dB 24 dB 15 dB Unlimited
<b>Optimize according to LR speakers settings</b>	Processing on LR target Align L&R on target Optimizer phase	IIR Only On On
<b>FIR and IIR settings</b>	FIR filters length Number of IIR filters IIR filters minimal frequency IIR filters maximal frequency Low-freq auto transition bandwidth Room smoothing method Norm used for level_hp (!= align)	100 ms 10 Automatic 150 Hz 1 octave Squared Modulus Full
<b>Level alignment settings</b>	Weighting used for levels Width of level window Maximum gain on speakers Minimum gain on speakers Minimal bandwidth frequency Maximal bandwidth frequency Bandwidth determination mode	dBA 16/f 10 dB -20 dB 10 Hz Unlimited Normal
<b>Subwoofer low-pass filter settings</b>	Cutoff frequency Filter type Filter order Rp value (for elliptic filter) Rs value (for elliptic filter) Subwoofer delay alignment	Disabled Butterworth 4 0.1 dB 80 dB Enable
<b>Decimation settings</b>	Decimation factor Decimation mode Antialiasing filter order Antialiasing filter cutoff Antialiasing filter Rp Antialiasing filter Rs	1 FIR only 8 19k x Fs/48k 0.03 dB 100 dB
<b>Advanced FIR settings</b>	FIR reference Number of parts for spconv Limiter used during inversion	5 ms Automatic None

Target curves are shown as dotted lines on the *After correction* plot of each speaker. Please note that the curves representing the speaker responses after correction also include the FIR EQ if it is activated, but they do not include any graphic EQ.

## 2 Speaker layout

### 2.1 Top view representation



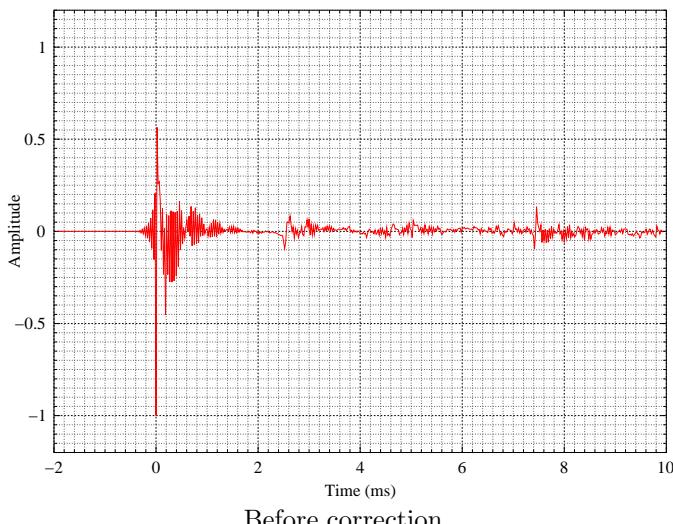
### 2.2 Speaker Information

Speaker	Distance	Elevation	Azimuth	Level (dBFS, A-weighted)	Delay	Bass Mgmt Delay	Delay Compensation	Polar- arity <sup>1</sup>	Crest Factor	Bandwidth (Hz)
1	2.06 m	1.2 °	28.5 °	-38.0 dB	6.00 ms	0.00 ms	0.00 ms	+	34.7 dB	9.3 – 24k
2	2.05 m	2.0 °	-29.0 °	-38.6 dB	5.98 ms	0.00 ms	0.02 ms	+	34.7 dB	9.3 – 24k

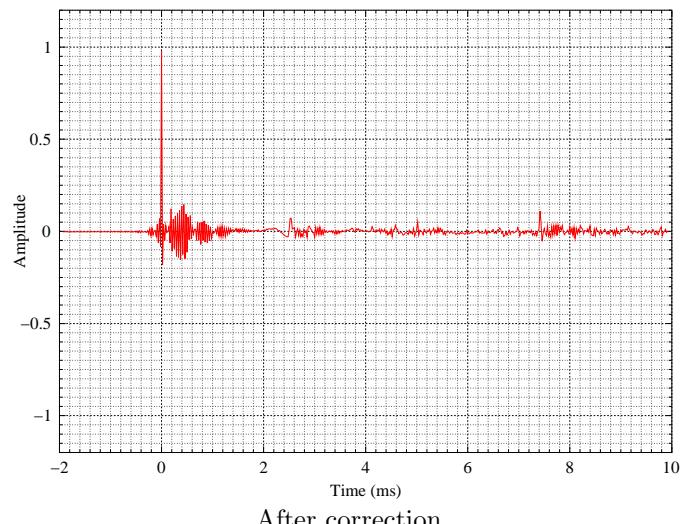
<sup>1</sup>In *Amplitude+Phase* optimization mode, speaker polarity is corrected by the phase optimization and is generally not indicated here. In *Amplitude* optimization mode, this column reflects measured polarity, which is corrected separately.

### 3 Speaker 1 (Loudspeaker at 2.06 m, elevation is 1°, azimuth is 29°)

#### 3.1 Impulse response

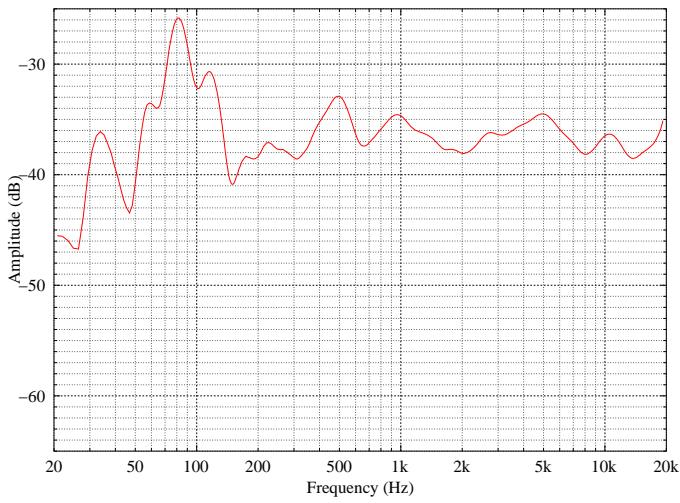


Before correction

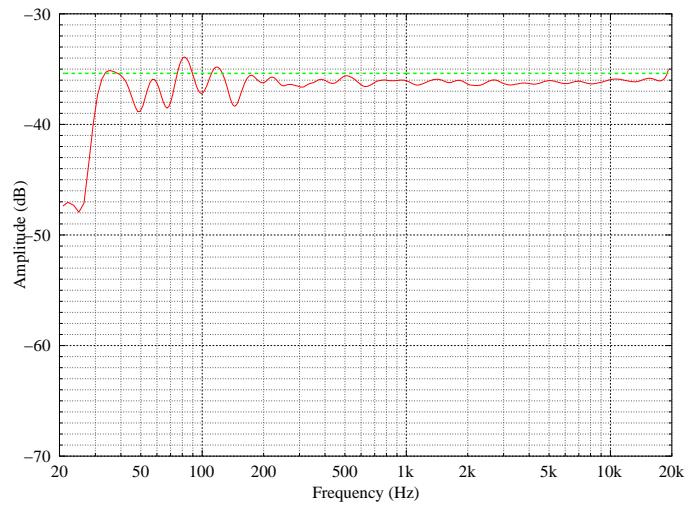


After correction

#### 3.2 Frequency response

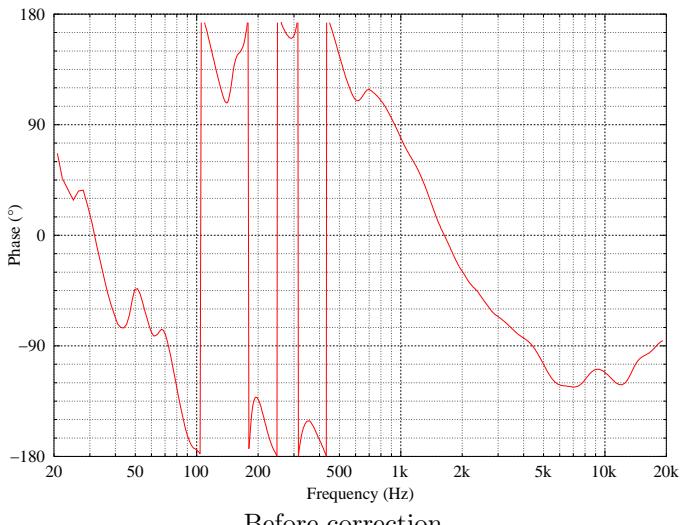


Before correction

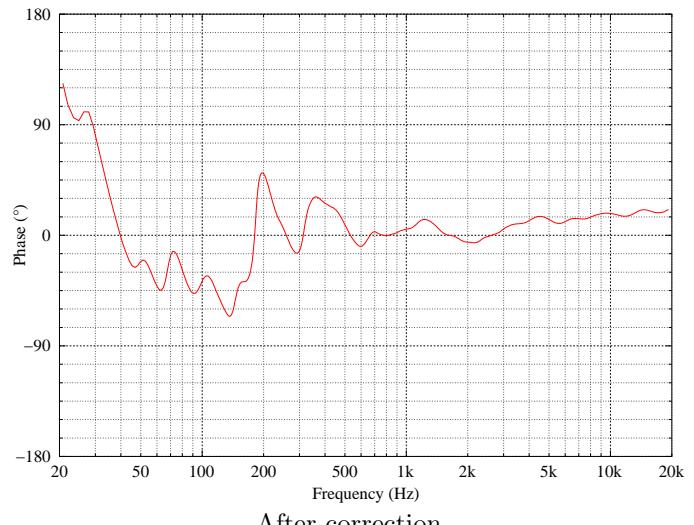


After correction

#### 3.3 Phase response



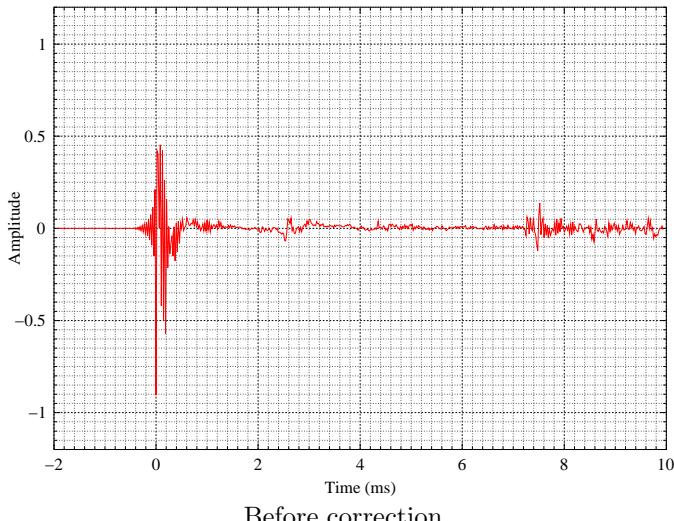
Before correction



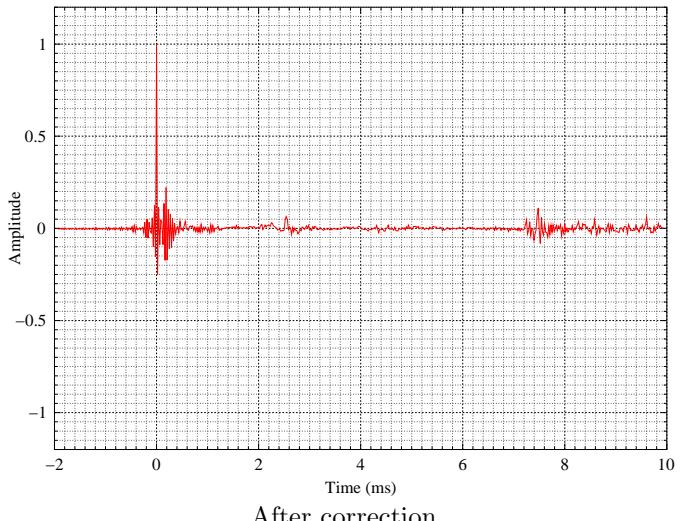
After correction

## 4 Speaker 2 (Loudspeaker at 2.05 m, elevation is $2^\circ$ , azimuth is $-29^\circ$ )

### 4.1 Impulse response

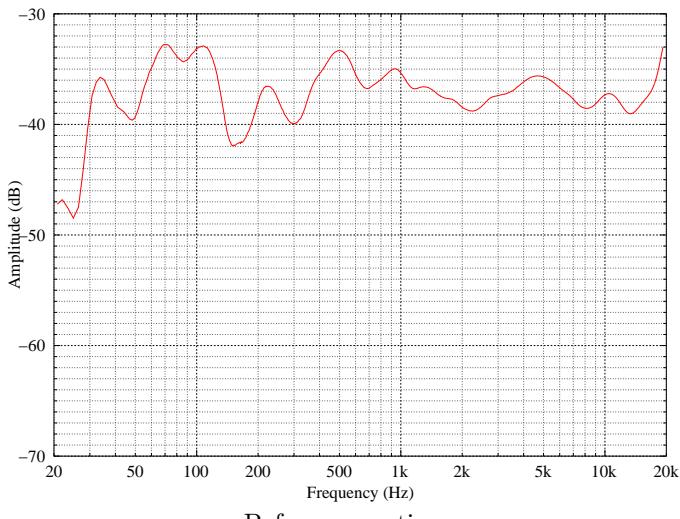


Before correction

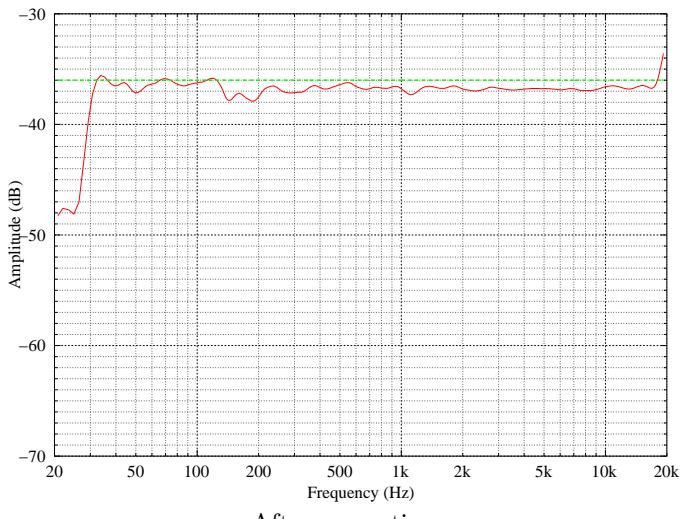


After correction

### 4.2 Frequency response

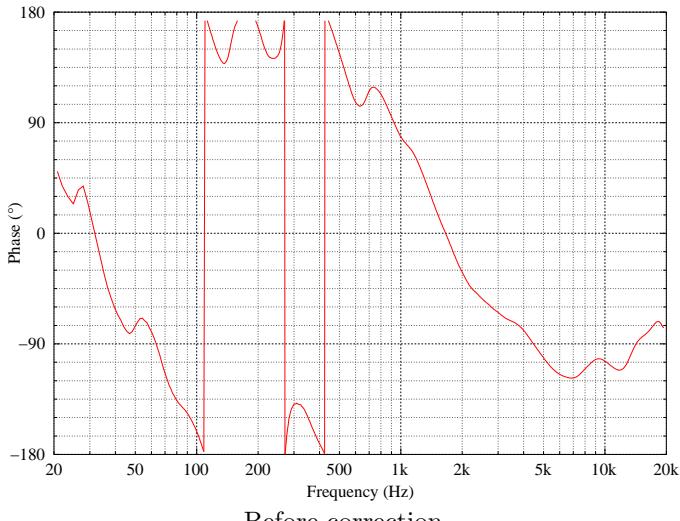


Before correction

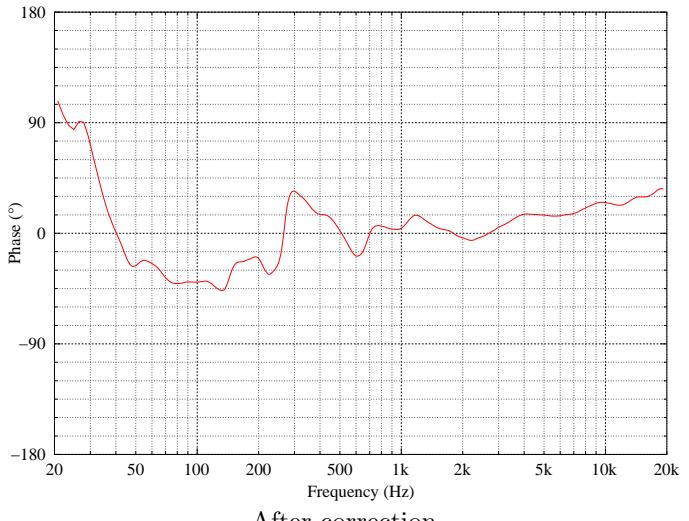


After correction

### 4.3 Phase response



Before correction



After correction