

TECHNICAL BULLETIN Product: m908 Date: 05/28/2021

Dolby Atmos Target Curve EQ Settings

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The publication <u>Dolby Atmos Music Studio Best Practices</u> provides guidance for setting up your music recording studio for Dolby Atmos production. Included in this document is the recommendation that the speaker playback system be calibrated to match the target curve for Dolby Atmos Music.

We can recommend two approaches achieving this in your room.

- 1. Add target curve EQ to existing room correction:
 - In this approach the following EQ bands are added to each speaker in an already calibrated playback system.

Filter Type	Frequency	Level	Q	
peak	16Hz	-2.3dB	1.52	
peak	71Hz	+1.2dB	0.44	
peak	185Hz	-0.6dB	0.86	
peak	5.77kHz	-1.4dB	0.6	
peak	20.0kHz	-6.4dB	0.20	

The resulting frequency response is shown below. The maximum error from the Dolby specified curve is +/-0.5dB which is well within the Dolby limits of +/-1.0dB.

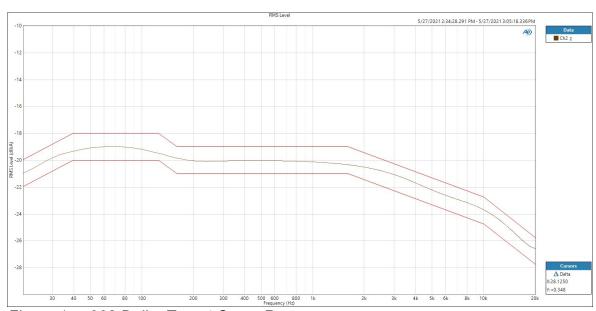


Figure 1: m908 Dolby Target Curve Response

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2. Calibrate room to Dolby Target curve.

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(1) In this approach the room is calibrated directly to the Dolby Target curve using whatever EQ settings are necessary. This will use fewer EQ bands than the first approach.

For either method of calibrating your room we have these suggestions for managing the Target Curve so that it can be turned on and off depending on project requirements.

- Create a copy of your current workflow. Backing it up to a USB drive is recommended. Rename the workflow to indicate that it will be for Atmos work. Load the new workflow and proceed with system calibration. To change back and forth from Atmos work to regular music production work simply load the appropriate workflow.
- For faster switching another option is to define two Control Room output speaker systems. One for regular music production and one for Atmos production. This will depend on having a Control Room output available for this function.

Rev.	Description	Date	Initials
А	Initial release	<u>5/28/21</u>	<u>MBG</u>