

# **Optimal Audio and Video Reproduction at Home**

Improving the Listening and Viewing Experience

## **Addendum: UHD HDR Benchmark**

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## 1 Introduction

In chapter 4 and 6 of my book *Optimal Audio and Video Reproduction: Improving the Listening and Viewing Experience* the Spears & Munsil HD Benchmark test disc is one of the test discs that you can use to calibrate your video equipment. Since the book has been published a third edition of this test disc has appeared which now includes UHD and HDR test patterns. In this addendum I show which test patterns can be used for the different instructions that I gave in my book. The tables list the original tables in the book and pair them with the new test patterns of the Spears & Munsil UHD HDR Benchmark test disc. If you consider to use this new edition of the disc, I highly recommend that you also read the third edition articles on the [Spears & Munsil website](#).

**Find out more at: [vincentverdult.nl](http://vincentverdult.nl) or [routledge.com](http://routledge.com)**

## 2 UHD HDR Test Patterns

Table	Test Pattern	
4.5	Video Setup	Bias Light
4.6	Advanced Video – Contrast Ratio	Sequential Off 0% Sequential On 100% 4×4 Checkerboard
4.7	Video Setup	Sharpness
6.2	Advanced Video – Evaluation	Geometry
6.3	Video Setup	Color Temp
6.4	Video Setup	Brightness
	Advanced Video – Evaluation	Dynamic Range Low
6.5	Video Setup	Contrast
	Advanced Video – Evaluation	Dynamic Range High
	Advanced Video – Ramps	Ramps
6.7	Video Setup	Color and Tint
6.9	Windows	Grayscale
6.11	Windows	Gamut
6.12	Video Setup	Framing
	Advanced Video – Evaluation	Image Cropping
	Advanced Video – Resolution	Luma Multiburst
	Video Processing	Scaling UHD Scaling HD
6.13	Video Setup	Sharpness
	Advanced Video – Resolution	Luma Wedge Luma Zone Plate
6.14	Video Setup	Color Space Evaluation
	Advanced Video – Evaluation	Color Space Evaluation Chroma Alignment Chroma Upsampling Error Dynamic Range High Dynamic Range Low
	Advanced Video – Resolution	Chroma Multiburst Chroma Wedge Chroma Zone Plate

### 3 UHD SDR Test Patterns

Table	Test Pattern		
4.5	SDR BT.709	Video Setup	Bias Light
4.7	SDR BT.709	Video Setup	Sharpness
6.2	SDR BT.709	Evaluation	Geometry
6.3	SDR BT.709	Video Setup	Color Temp
6.4	SDR BT.709	Video Setup	Brightness
		Evaluation	Dynamic Range Low
6.5	SDR BT.709	Video Setup	Contrast
		Evaluation	Dynamic Range High
			Clipping
6.7	SDR BT.709	Video Setup	Color and Tint
6.8	SDR BT.709	Video Setup	Brightness
6.12	SDR BT.709	Video Setup	Framing
		Evaluation	Image Cropping
		Resolution	Luma Multiburst
		Video Processing	Scaling UHD
			Scaling HD
6.13	SDR BT.709	Video Setup	Sharpness
		Resolution	Luma Wedge
			Luma Zone Plate
6.14	SDR BT.709	Video Setup	Color Space Evaluation
			Evaluation
		Chroma Alignment	
		Chroma Upsampling Error	
		Dynamic Range High	
		Dynamic Range Low	
		Clipping	
		Resolution	
			Chroma Wedge
			Chroma Zone Plate

# **Optimal Audio and Video Reproduction at Home**

## **Improving the Listening and Viewing Experience**

Routledge, 1st edition (2019), 356 pages, 208 illustrations

**Optimal Audio and Video Reproduction at Home** is a comprehensive guide that will help you set up a modern audio-video system in a small room such as a home theatre or studio control room.

This book covers everything you need to know to optimize the reproduction of multichannel audio and high-resolution video. It provides concrete advice on equipment set up, display calibration, loudspeaker positioning, room acoustics, and much more.

Detailed, easy-to-grasp explanations of the underlying principles ensure you will make the right choices, find alternatives, and separate the rigid from the more flexible requirements to achieve the best possible results.

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